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Stuart Plattner
Associate Professor of Anthropology
Department of Anthropology
University of Missouri - St. Louis
St. Louis, Missouri 63121

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1. Introduction

When information about the quality of a good is not fully and reliably available to buyers and sellers, the theory of perfectly competitive markets does not apply [1, 4, 8, 14] . Akerlof[1] showed how the market will be impeded for a commodity whose quality is only ascertainable through use and not through simple inspection, like a "lemon" in the used car market. In a variation on Gresham's law, the lemons will drive the good cars off the market. Because the buyer cannot tell if any particular used car is a lemon or not, he will not pay more than the market price. Since the seller knows his car's attributes perfectly well, he will not sell a good car for the low price commanded by lemons. Good cars will tend not to be traded, and the market will consist of a disproportionate number of lemons.

The solution on this problem is well-known: as a local automobile agency advertises, "If you don't know cars, know your dealer." Trust between buyer and seller can substitute for knowledge. When people see a particular exchange as one in a continuous stream of exchanges embedded in an enduring relationship, lack of knowledge in the short run is not critical. If subsequent information shows a deal to have been unfair to one side, the detriment can be made up by equilibrating later exchanges. Wilson (1980) showed how long term reciprocal relationships between fishermen and fish buyers stabilized a market situation that, because of skimpy information and small numbers, would otherwise have been wildly irregular, or else so unfair to fishermen that the market would have withered [14]. The exchanges studied by Wilson dealt in thousands of

dollars, existed over many years, and had social implications outside the boundaries of commerce. In an intriguing paragraph he suggests that linguistic and social abilities of fishermen may "modify significantly the traditional measure of individual economic success - efficiency in the production or distribution of fish" (p. 497). In other words, non-economic attributes of individual bosses, which allowed them to create and maintain the trust of buyers, may have been more crucial than efficient production of fish, especially to the marginal fishermen. "Failure to fulfil the (socio-cultural) criteria may deny an individual access to those factors - especially market information - necessary to achieve efficiency in this first place." (p.498)

This paper analyzes a comparable situation where vendors in an urban public produce marketplace (Soulard Market, in St. Louis, Missouri) rely on long-term reciprocal relationships with sellers and buyers. This is not surprising on the wholesale level, where the marketplace vendors buy odd lots of fresh produce. Each transaction is relatively significant, there are only a few participants, and the quality of each lot of produce cannot be fully and accurately known until every case is unpacked, which is not feasible until the produce is transported to the retail marketplace. Thus in market size and informational constraints, the wholesale produce dealings are comparable to those described by Wilson.

A similar reliance on long run relationships exists on the retail side of the marketplace vendors' business. Although the flow of information in a public markeplace seems totally free - all a shopper has to do is stroll the aisles of the marketplace and observe the displays of produce and posted prices - the true quality of the produce is unknown until it is consumed.

Reasons for buyers and sellers to establish long-term relationships in a competitive marketplace are discussed more fully in Section 2. Sections 3 and 4 describe the social and economic characteristics of Soulard Market and present quantitative evidence of the importance of custom in shopping. The results are summarized in Section 5.

2. Economic Custom

Two extreme relationships are possible between buyers and sellers in a market place. On one hand the exchange can be purely anonymous - a simple trade of money for goods, with a minimum of words said. It is not necessary to establish eye contact. This narrow relationship is not "purely" economic since the fact that each actor has a social status - a race, ethnic identity, etc., - gives social meaning to the exchange. Yet the terms of that specific trade are its dominant attribute. Each participant expects nothing more from the transaction but the unique content of the exchange. It is specific, non-reciprocal, closed-ended (with no expectation of future dealings), and short-term.

On the other hand the exchange can be embedded in a thick fabric of meanings and reciprocities. The individuals may customarily trade information, affect, labor, equipment, or goods. The terms of any particular commercial exchange may have meaning far beyond the money-for-goods domain. The long-run relationship is dominant, and each exchange serves more to maintain the relationship than to trade values. Thus I help my neighbor fix his garden fence (because we are good neighbors and he needs my help) and he sells produce from his stand to me for a low price (because we are friendly neighbors). This sort of relationship is generalized, reciprocal, open-ended, and long-run (e.g., [11] Ch. 5; [12] Ch. 4).

Public produce marketplaces are designed for anonymous short-term exchange relationships. The numerous comparable small firms, open displays, and posted (in developed countries) prices stimulate comparison shopping. Why then should a shopper choose to habitually buy from one firm instead of searching out the best deal? The consumer qualities of fresh produce are relevant to this question. Nelson contrasts goods whose properties are knowable only after purchase ("experience quality") and commodities whose attributes are found out before purchase ("search quality") [8]. Fresh produce is variable, and most modern supermarket-trained consumers have lost the knowledge needed to judge varieties, seasonal attributes, and grades. Thus consumers often buy produce whose real quality is apparent only upon consumption. This is no problem in supermarket purchases, where the consumer's imperious right allows the return or exchange of any product for practically any reason. A discovery, at home, of substandard quality in a marketplace purchase may be equilibrated by extra consideration in future purchases if the consumer and merchant have a re- lationship. Marketplace vendors who wish to attract regular customers often invite them to return and claim extra goods if their purchase is not ac- ceptable. The benefits for sellers are more regular sales; for buyers the insurance and service aspects of the relationship.

Marketplace vendors have good reason to want to regularize their income. Small, independent family firms have no income maintenance except welfare, which most despise. If a market family with no outside support (about half the firms in the marketplace studied) misses a selling week, the family earns no income for that week. Families with other occupations depend upon their market income, since their salaries are very low. In this situation of

fluctuating income (the standard deviation of weekly gross income reported
to Note 1 is 83% of the mean) some may choose to stabilize their incomes by
attracting a large set of regular customers. To other vendors, the cost of
providing extra service and maintaining a dependable inventory is not worth
it. They prefer to be free to focus on the most profitable items each week.
The empirical question of which strategy in fact produces more income will
be dealt with in Section 4.

Marketplace shoppers can prefer regular relationships with vendors for
reasons other than the equilibrating function. If shopping time is valuable,
then the subjective savings of grouped purchases from one firm may exceed the
losses in missed deals by not fully searching the marketplace. Such losses
may be less salient since the marketplace is significantly and consistently
cheaper than local chain stores [9]. Thus habitual customers can still get
most of the benefits of low prices, save shopping time, and in addition
enjoy a high level of service. Since quality differences are harder for
average shoppers to judge than price inequalities, a trust relationship
gives the buyers the benefit of the vendor's expertise as a judge of produce
quality (e.g., "please pick me out a ripe melon").

Other likely causes of regular relationships seem irrelevant to the
retail marketplace situation. Since few sales are on credit the need for
additional information about debtor customers does not apply [14] . It is
conceivable that a vendor could attract steady customers with price reductions
derived from the scale benefits of steady sales, but the savings are not
large enough to justify significant price reductions. The size of most market-
place produce firms is too small to benefit from petty increases in scale.[1]

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1. The average weekly gross sales in a sample of 621 observations over 60
   weeks in 1978-79 was $1,267, SD=1,046.

Social benefits from customary shopping are important, yet hard to measure. They accrue mainly to customers, many of whom shop in market-places because they enjoy it. The excitement and security of being in a market crowd, the sense of significance and connection to basic values that comes from dealing with the owners of the business or the growers of the produce attract some individuals. Some resent the anonymous scale and indifferent salaried employees of the chain stores, and welcome the human contact of the marketplace. By becoming a regular customer of a market firm a consumer can regain a level of service that was lost when chain stores displaced neighborhood food stores. These factors can out-weigh price for a few, but for most buyers they validate a prior decision to shop from marketplace firms because they offer a wide assortment, high quality, and low prices.

Any particular shopper can be a pure price-searcher for one item and a habitual, steady customer for another. Thus even where price and quality information is widely available, buyers may prefer to restrict their search for the best deal. The empirical question dealt with in the rest of this paper is, how important is such customary shopping in a freely competitive marketplace?

3. Soulard Market

This paper is based on data from Soulard Farmers Market, St. Louis, Missouri. The marketplace has existed since the early nineteenth century. It is located in a mixed industrial, decayed-and-renewing-housing neighbor-hood of St. Louis City comparable to Detroit's Eastern market [5]. During the summer about ninety firms, who rent stalls on an annual basis, fill the market on Fridays and Saturdays selling fresh produce and other

foods. An additional twenty or so firms rent stalls on a daily basis and sell non-food items. During the winter most of the farmers drop out and a small number of merchants continue to sell shipped-in produce to the hardy regular patrons of the market.

The typical vendor at Soulard Market is from a family that has been on the market 50 years or three generations or more [3, 6]. This makes the marketplace a remarkably stable institution in a society which stresses mobility and change. Most vendors have relatives in other Soulard Market firms (only 12 of 180 marketplace personnel surveyed in 1978 were not related to a family firm. Fifty one percent had more than 10 relatives working at the market). Practically all of the farmers are of German descent and most of the merchants (who sell produce bought at Produce Row, the local wholesale market) are southern Italian. The Italian merchants have extensive kinship and friendship relations with the wholesalers they depend on for supplies. Some Soulard marketers have worked at the wholesale market and all have spent thousands of hours in the blue-collar, all-male atmosphere of Produce Row. Since the wholesale dealings are conducted in the middle of the night the participants have the additional feeling of solidarity common to night workers.

Public marketplaces today exist in a part-anachronistic, part-functional relation to the national produce industry of vertically integrated supermarket chains, warehouses, shippers, terminal (wholesale) markets and industrial farms. The function stems from the flexibility that public marketplaces give produce jobbers. Fresh produce is extremely susceptible to deterioration from mishandling. The hard working family firms use their low-paid labor to sell produce that requires more

processing or trimming than chain stores, with union-scale produce
clerks, can afford to deal in. Jobbers can sell small remnant lots,
misdirected or below grade produce to marketplace retailers instead of
writing these odd lots off. This reduces the cost of doing business for
everyone concerned [10]. Soulard Market, like other public marketplaces,
connects the informal economy of small scale family firms and the formal
economy of produce agri-business. Surviving marketplaces exist in positive
integration with the corporate-farm chain-store complex that replaced
them as the dominant distribution channel for food in the U. S. [2] .

Contemporary public marketplaces are also blatantly anachronistic
and self-servingly picturesque. City shoppers love farmers and the
concept of home-grown produce, even though many cannot distinguish
local from shipped-in produce. Soulard Market is a pleasant reminder
of a past when buyers were more skilled in discriminating and using
various grades and varieties of fresh produce than modern shoppers.
Soulard is also a "real" marketplace, where consumers buy their basic
weekly foodstuffs from independent family firms. It is not a redeveloped
shopping mall that uses a marketplace theme to house luxury-and dis-
cretionary-good vendors who, as often as not, are outlets of large chains.
As such, Soulard, in common with the public marketplaces of the Third
World, is similar to the purely competitive market of classical economic
theory [7].

4. Empirical Estimates of Economic Custom

The argument so far has shown that long term reciprocal relationships
between buyers and sellers may be expected even in competitive marketplaces
of small scale produce firms. If this reasoning is correct then some
empirical evidence for custom should be forthcoming. The firms aim to
sell produce, and their gross sales are the most salient measure of their

success. A multiple regression analysis, with gross sales as the dependent

variable, is appropriate since the goal is to assess the impact of some

among many causes of sales.

Two variables whose interpretation reflects economic custom will be

included: The price level of each firm with respect to other market firms,

and the similarity of each firm's assortment of produce compared to its

stock in previous weeks.

Price

Since competing firms offering comparable produce are close, often

adjacent, in a competitive marketplace, each firm should face elastic

demand. The demand for the basic foodstuffs sold in the marketplace as a whole

should be price inelastic, of course. However, some marketplace firms

cater to steady customers who buy their entire produce shopping list

from one firm. These firms can charge somewhat more than the market

price since the convenience for the customer may outweight the slight

additional cost. The low overall price level of the marketplace, as

compared with supermarket prices, may make small deviations within the

marketplace less significant than otherwise. The price of each item

sold from each stand was converted into a standard deviation unit from

the mean market price that day. These SD measures were then averaged

over each firm's inventory to give each firm a mean price level score.

A positive regression coefficient for this variable would be inferential

evidence of the importance of economic custom.

This interpretation is complicated by the fact that some aspects of

quality were not distinguished in this data.[2] Thus higher prices can

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2. Size and variety are distinguished in the data (e.g., large, medium,
    or small oranges, types of apples, etc.) but not "high" from "low"
    quality produce.

reflect higher quality. However the three fieldworkers in the project often remarked, over the sixty week period of data collection, that the same quality produce was offered by firms at different prices. This should not be taken to mean that firms did not adapt their prices to the market, or that there was no "market price". The point is that pricing is a complex process even in this small-scale public marketplace.

Similarity

Customary shoppers should demand consistency in the assortment of produce offered by "their" firms. Vendors who do not cater to regular customers are free to vary their assortment in order to fully exploit the opportunities offered by the wholesale market. Since the basic function of Soulard Market is as a safety valve for the wholesale produce market, each week can present a different structure of opportunities for maximal profit. One cannot tell beforehand when below-grade produce will be rejected by a consignee and put up for "distress" sale at the wholesale market. If a retail family-firm boss is on the spot he can take advantage of the situation. This opportunistic feature of produce marketing is graphically expressed by a Soulard Market vendor, who also works at a wholesale jobbing firm:

"Now, last week I would never in a blue moon thought that we would sell strawberries. In the beginning of the week strawberries were real strong going for $7.00. At $6.85 to $7.00 a box they were real strong. Where I work at we were rationing straw- berries out. We didn't put them on display because we'd have none to sell... ...I figured that maybe this weekend I would buy maybe six or eight strawberries, [for his Soulard Market firm], just for steady trade who ask for strawberries. Sell them just to get my money back or make a dime or a quarter, I would be happy.

Then I walk up to work one day, and I get a strong strawberry smell, and boy, 'who in the hell dropped this pallet of straw- berries?,' and I walked over and these guys were unloading a whole load of strawberries. They got smashed, some of the boxes. So then I said, 'Halleluja, we're going to sell strawberries this week' Right off the start I knew I was going to sell strawberries, as soon as I saw that truck.' "

The damaged boxes required more handling than non-family labor firms could afford, thus the produce would be sold by a jobber for salvage. This particular quote also illustrates the care some vendors take to satisfy their regular customers' needs for a consistent supply of produce.

The more carefully a firm caters to its regular customers' needs, the more similar each week's inventory will be to the previous week. A variable expressing this similarity, as the proportion of items in a week that were offered for sale the previous week, will have a positive effect on a firm's sales insofar as steady customers are significant in the sale of produce firms at a competitive marketplace.

These variables will be included in a model of the economic behavior of family firms in the market place. The dependent variable is gross sales per firm in a market week. Besides capital (stalls) and labor (workers), other independent factors significantly affect the level of gross sales revenues. These include the scale effect of having numerous items for sale; the season of the year; the existence of holidays; and the location of the firm's stand in the marketplace. In an effort to measure the con- tributions to gross sales revenues of the variables which relate to economic custom, variables will be included to control for the number of items on the stand; the temperature (a proxy for the season); Christmas, the major market holiday; and location in the North, the more lively of the two

sides of the market.

A double log function was chosen because of non-linearities in the scatter plots of major variables with the dependent variable, The function used is:

$$\$ = A\ K^{\underline{a}}\ L^{\underline{b}}\ I^{\underline{c}}\ T^{\underline{d}}\ H^{\underline{e}}\ W^{\underline{f}}\ P^{\underline{g}}\ S^{\underline{h}}\ e \tag{1}$$

Where $\$$ is gross sales revenue, A is a constant, K stands for stalls, L for workers, I for items, T for temperature, H for the Christmas holiday, W for wing location, P for the price level, S for the similarity measure, $\underline{a}$ through $\underline{h}$ are parameters and $\underline{e}$ is the error term. The estimating equation for (1) will be:

$$In\$ = A + \underline{a}lnK + \underline{b}lnL + \underline{c}lnI + \underline{d}lnT + \underline{e}H* + \underline{f}W* + \underline{g}P + \underline{h}S \tag{2}$$

Where asterisks denote dummy variables, and to which the standard direct least-squares procedure is applicable.

The results of equation (2) fitted to the sample of 256 observations of up to 12 firms per week (cross-section) over 60 weeks gives:

$$In\$ = 2.04 + .56\underline{lnK} + .26\underline{lnL} + .55\underline{lnI} + .44\underline{lnT} + .76\underline{dH} + .55\underline{dW} \tag{3}$$
$$\quad\ (.39)\ (.09)\quad (.08)\quad (.07)\quad (.07)\quad (.16)\quad (.06)$$

$$+ .19P + .30S.\ R^2 = .74,\ F = 90.\ \text{(Figures in parentheses are}$$
$$\ (.06)\quad (.12)\qquad\qquad\qquad\qquad\qquad \text{standard errors).}$$

The coefficients for the variables Price and Similarity are positive and significant (at the .01 level or greater). Thus, we can tentatively conclude that economic custom is important in the market. However, it is possible that omitted variables, including managerial ability, are biasing these results. No exogeneous measure of managerial performance was obtained, but is is reasonable to assume that this capacity is an attribute of bosses. Since bosses are directly and closely involved in all aspects of the behavior of their firms, from ordering the produce, to setting up the displays, pricing each item, maintaining the displays, and trimming produce throughout the day, then the inclusion of a set of variables

representing interfirm differences should control for this omitted variable bias. Of course the coefficients of the set of firm-specific variables cannot be interpreted, since they may also reflect the influence of other omitted variables. But the change in Similarity and Price is of primary interest here, and the firm-specific dummy variables should serve the purpose of allowing a more accurate estimate of these two coefficents.

A function including firm-specific variables can be specified as follows:[3]

3. The variables Stalls and Wing location are omitted from this function because of multicollinearity with the firm dummy variables.

$$\ln S = a_1 F_1 + a_2 F_2 + a_3 F_3 \cdots + a_{11} F_{11} + a_{12} \ln L + a_{13} \ln I + \quad (4)$$
$$a_{14} \ln T + a_{15} dH + a_{16} P + a_{17} S.$$

The estimate of (4) on the 256 observations yields:

$$\ln S = 1.5 F_1 + 1.2 F_2 + .4 F_3 + 1.5 F_4 + .8 F_5 + 1.0 F_6 + 1.5 F_7 + \quad (5)$$
$$(.09) \quad (.30) \quad (.32) \quad (.12) \quad (.10) \quad (.11) \quad (.10)$$

$$1.0 F_8 + .8 F_9 + 1.7 F_{10} + .9 F_{11} + .13 \ln L + .76 \ln I + .51 \ln T$$
$$(.15) \quad (.31) \quad (.14) \quad (.17) \quad (.07) \quad (.09) \quad (.05)$$

$$+ .61 dH + .18 P + .30 S. \quad R^2 = .86 \quad F = 96.$$
$$(.13) \quad (.05) \quad (.09)$$

The coefficient for Firm 3 is not significant at the .05 level; all other coefficients are significant at that level or greater. The coefficients for Price and Similarity are unchanged in magnitude and sign, but have smaller standard errors. The inclusion of the set of variables which should control for interfirm differences in managerial ability (plus whatever else may be contained in interfirm differences) did not change the coefficients of the varables pertaining to economic custom.

The main purpose of selling on the market is to earn a net or "take-home" income, not merely to generate gross sales. Insofar as the two variables are correlated ($r = .86$) the analysis of gross sales should be valid for net income. To check this the model in equation 4 was run on net income (I), defined as gross sales minus all relevant costs (wholesale cost of goods, workers at \$20 per day, stalls at a weekly rate, bags, electricity, and an estimated sales tax payment on the gross sales). The resulting estimate on the 256 observations yields:

$$I = -1128 + 361F_1 - .59F_2 - 269F_3 + 463F_4 - 12F_5 + 287F_6 + 345F_7 \quad (6)$$
$$\quad\quad (82) \quad\quad (259) \quad (286) \quad (95) \quad (85) \quad (82) \quad (85)$$

$$+ 521F_8 + 218F_9 + 810F_{10} + 609F_{11} - 30L + 111P + 18S + 261\underline{lnT}$$
$$\quad (99) \quad (260) \quad (106) \quad (116) \quad (16) \quad (42) \quad (8) \quad (44)$$

$$+ 573dH. \quad R^2 = .46, \quad F = 14. \text{ (figures in parenthesis are standard}$$
$$\quad (114) \quad\quad\quad\quad\quad\quad\quad\quad\quad \text{errors).}$$

This equation is interesting for the negative sign of labor, which shows that income sharing among family workers is more important to managers than profit maximization (narrowly defined as accruing only to the firm's boss). Adding items has no direct effect on net income, as shown by the variable's failure to enter the equation with a significant coefficient (the coefficients for Firms 2,3,5 and 9 are likewise not significant). The coefficients for Similarity and Price are positive and significant (Price at the .01 and Similarity at the .05 level). Thus the empirical importance of economic custom is maintained when net income, rather than gross sales, is the dependent variable.

Conclusion

Customers in a public marketplace seem to enjoy copious information

about the produce, but in some circumstances prefer to ignore the benefits of comparison shopping and become steady customers of particular firms. The fact that the quality of fresh produce is not accurately known until it is consumed suggests a basis for economic custom: that the customer has the expectation of redress in future transactions if the value of the present exchange is discovered to be unacceptable. The role of the market place in the regional produce industry guarantees a low overall price level as compared with chain-store levels, so customers can enjoy the service aspect of regular patronage without sacrificing all of the price savings.

Merchants in public produce marketplaces, operating in an informal economy with no unemployment insurance, stabilize their incomes by catering to regular customers. These vendors make use of the wholesale produce market in order to deal in low-priced goods. Many consistently maintain a regular set of items - in spite of the profit attributes of each item-in order to satisfy the demands of steady customers. The empirical analysis showed that this patronage paid off in larger gross sales, holding other causal factors constant.

Thus when confronted with the maximal freedom of market choice, many actors establish confining regular relationships. Buyers do this out of convenience and habit; sellers out of convenience, habit and profit.

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