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Market institutions and economic evolution

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Abstract. Our cognitive limitations cause us to rely on institutions to guide reasonable behaviour; market institutions reduce the costs of search, negotiation, and monitoring entailed in making single transactions. The making of markets requires an investment of immaterial capital, the major share of which typically is provided by those who expect to be very active on one side of the market. This 'external organisation' provides producers with information for the development of new products; by simplifying transactions it also allows consumers greater scope for developing consumption capabilities. Thus the evolution of institutions guides the evolution of goods and services.

Key words: Institutions - Markets - Producers - Consumers - Evolution

JEL-classification: D1, D2, L1, L2, O1

A *market* is a specific institutional arrangement consisting of rules and conventions that make possible a large number of voluntary transfers of property rights on a regular basis.

Ménard 1995, p. 170.

1 Introduction

Readers of this Journal may be willing to accept without further justification, as a premise of this paper, that institutions develop through evolutionary processes, where such processes are characterised by trial and error rather than ex-ante optimization. In economic systems these trials are often

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the result of purposeful, though fallible, behavior, and therefore the ways in which particular options are formulated should not be modelled in accordance with any a priori assumption, but are proper subjects for investigation. The first major theme of this paper is the formation of the 'specific institutional arrangements' which define markets. As Lachmann (1986) suggested, we shall be interested in markets rather than 'the market', for markets differ in their institutional arrangements.

It may also be sufficient for this readership to state that institutions provide a framework within which other evolutionary processes operate, on a time-scale within which it can usually – though not always – be assumed that this framework does not change. The second major theme of this paper is an examination of the processes which are influenced by the institutions of a market, and this includes not only market processes but also nonmarket processes which these market processes make possible. Within the constraints of space, this examination will be no more than indicative.

2 The evolution of markets

2.1 Cognition and institutions

Evolutionary processes generate development 'from within', in Schumpeter's (1934, p. 63) phrase. Rational choice theory, even when extended to include contingencies and information costs, ties outcomes firmly to premises, and these premises are supplied exogenously, in principle by events, but in practice often by the analyst. Any change in behavior is therefore a consequence of a change which is not itself capable of explanation within the analysis; all innovation originates outside the system. If we wish, as in this paper, to develop a basis for internal explanation, it is necessary to avoid rational choice theory.

That does not mean avoiding the concept of acting for a reason; what it means is that the actor cannot know whether the reasons for action are sufficient. That follows directly from a further premise which should be clearly stated, and which may not be quite as readily accepted as the previous two. Because our cognitive capacities cannot match the complexities of our situation, we must act on the basis of representations which are often of dubious adequacy and procedures which are of uncertain value. Moreover we do not have the time or ability to formulate more than a very small proportion of these representations and procedures for ourselves, and therefore often rely on those which appear to be used by other people. Thus the rules and conventions that we call 'institutions' are first of all aids in solving individual problems; they make these problems manageable by allowing us to close our models and thus deduce what we should do (Choi, 1993). Tightly drawn rules and conventions we may call routines; but we should note that even routine behavior is not possible unless we are willing to act as if our classification system were complete. Parts of these classification systems, likewise, are often adapted from other people; and often gratefully so.

In addition to supplementing our cognitive capabilities, institutions give us confidence. Our readiness to act, whether based on explicit reason or implicit routine, is frequently supported by a belief that other, successful, people rely on similar representations and similar procedures; sometimes, indeed, such a belief may be crucial, as has been noted in rather different contexts by Adam Smith (1976a) and Keynes (1937). The personal value of rules and conventions is an important factor in explaining how they come to be accepted as aids to the solution of co-ordination problems, and thus forms part of the explanation of the development of institutional arrangements in particular markets. But this sequence can also be reversed; and in the latter part of this paper I shall suggest how the institutions of a market, which are indeed aids to the solution of co-ordination problems, may also help us, sometimes indirectly, to manage our lives.

Institutions are frictions which, like frictions in mechanical systems, by restricting movement may make controlled movement possible. 'Thanks to friction, innovation is preserved, organization kept up, and permanence maintained' (Lesourne, 1992, p. 9). It is by preventing the exploration of many possibilities that institutions economise each individual's scarce resource of cognition and focus the attention of that individual on a particular range of options. The institutions of an academic discipline or a commercial organization encourage similar representations, similar possibilities, and similar procedures among its members, and thus reduce the costs of transacting ideas. (The first two paragraphs of this paper should illustrate this reduction in transaction costs; there are groups of economists for which this means of reduction would not be effective.) What people, individually or collectively, decide is substantially influenced by how they decide; and thus the institutional framework of decision-making is an important factor in the explanation of endogenous change.

Institutions are necessarily a mixed blessing. Cognitive maps, decision premises, procedural rules, and the like are necessarily retrospective; they anchor the definition of problems and the repertoire of responses to past environments, and inhibit the range of experimentation. In some circumstances they may be actively misleading: who needs a telephone when the telegraph system provides a ready-made record of all messages; who needs a photocopier when carbon copies are produced by the typing process? (Garud et al., 1997). But in applying the logic of appropriateness they relinquish some claims on the imagination, and release it for other uses; they allow people to apply the logic of consequence that is required for reasoned decisions, or alternatively to make bold conjectures which go beyond either logic. A significant innovation may be produced by opening up one segment of the institutional framework, or by seeking intelligently to apply rules and conventions outside the familiar limits. As G.K. Chesterton once remarked 'A man must be orthodox on most things, or he will never have the time to practice his own particular heresy'.

2.2 Why markets?

In much of economics, markets appear as a natural given; if there is a good, then there is a market; and the classification of goods is part of the analyst's natural endowment. Indeed, in the analysis of those economic problems in which markets are missing, such as public goods and unpriced externalities, the first task is to explain why markets fail to appear. But markets are themselves goods (of what Austrians would call a higher order, being indirect means to human satisfaction) and we can enquire into their costs and benefits. We should begin with the latter, and we immediately notice that in an economy which is operating within an Arrow-Debreu equilibrium no markets are open. In that analysis markets are required only for arriving at a set of contracts which supports an equilibrium; once a consistent set of contracts has been agreed for every date and every contingency no-one has any further need of them. A market that has cleared is a market that has closed. The Arrow-Debreu model thus shows us what the world would have to be like for continuous markets not to be necessary - as, not coincidentally, it shows us what the world would have to be like if it were to be free from Keynesian problems (Hahn, 1984, p. 65). Markets facilitate the making of new contracts; the first requirement therefore is that at least some people either have not already settled everything or now wish to change some of the agreements which they have previously made. Markets are goods only in circumstances of uncertainty and change; in those circumstances, we might say, they substitute for rational expectations.

However, the wish to make new agreements does not automatically entail a wish to use a market – not, that is, if we are thinking of a market as an institutional arrangement rather than a convenient analytical fiction, which is the way that it is treated (as is the firm) in most economic analysis. Many such agreements are concluded by private negotiation. But negotiating a long series of private agreements to handle a large number of voluntary transfers of property rights may entail a good deal of time and trouble. Coase (1937) drew attention to the costs of finding potential trading partners and negotiating with them as costs of using markets; but because his purpose was to identify some costs within markets which might be compared with the costs of managing a firm he did not pause to note how much higher the costs of finding and negotiating with trading partners might be without the support of market institutions. What makes a market a good is its potential for enabling large numbers of transactions to be arranged and carried out at lower costs than would be incurred if that market did not exist. A market is not a source of transaction costs, but a means of reducing transaction costs below the levels experienced in the absence of markets. (The analytical costs of general equilibrium theory which are saved by the market institution of the supposedly-Walrasian auctioneer provide an appropriate parable for theorists.) Because standard microeconomics does not explicitly consider the costs and benefits of the exchange process it has no theory of exchange; what would be the content of an economic theory in which production was costless?

'Large numbers' are important because the institutions of a market provide an oriented set of complementary immaterial capital goods which reduces the direct cost of individual transactions, just as an oriented configuration of complementary physical capital goods reduces the direct cost of manufacturing a single product; how much it is worth investing in capital goods for either purpose depends upon the potential investor's expectations of volume. But since the creation of a market reduces the costs of transacting for many transactors, these institutions appear to have the characteristics of public goods; and so in accounting for the evolution of markets we have to explain how this stock of complementary capital comes to be accumulated.

Sometimes the necessary investment is made by those who expect to benefit by charging the users – originally, for example, by kings, town governors, or merchant guilds, and later by private individuals or companies, who constructed buildings such as Corn Exchanges in which potential transactors could meet and trade according to specified procedures, or inaugurated newsheets in which people paid to specify which transactions they wished to arrange. Exchanges which are organized for profit are still important for some transactions, and classified advertisements in newspapers, many of which are distributed free, constitute an important class of market institutions which reduce the costs of the transactors sufficiently to allow the providers of these institutions to charge users enough to cover their costs. However, such identifiable markets, organized for direct profit from the supply of transaction services, are not the subject of this paper.

2.3 Making markets

It is natural to think of most modern markets as having no single physical manifestation (though often they have many well-advertised locations and regular times of opening), and it might seem equally natural to think that, in contrast to the designed organizations called firms, they have evolved as unintended consequences of individual human action. That they are the product of evolutionary processes, the outcomes of which were designed by no-one, is correct; but that there were no deliberate commitments of resources in order to create institutional arrangements that would reduce the direct costs of single transactions is not -just as it is not true that the present position of any firm which has been in existence for some time is exactly what its founders intended. Most of the investment in making a particular market is provided by those who expect to be large-scale transactors on one or both sides of that market, and who therefore expect to gain a large enough share of the benefits to justify bearing an even greater share of the costs. Their incentive to create this particular higher-order good lies in the additional gains from trade that they expect to secure for themselves.

Casson (1982, p. 164) provides a convenient summary of the initial obstacles to trade: no contact between buyer and seller, no knowledge of reciprocal wants, no agreement over price, the need to exchange custody of goods, no confidence that goods correspond to specification, and no confidence about restitution in case of default. The combined effect of all these obstacles interposes substantial transaction costs between the potential benefits to the purchaser and the direct costs of production; and the creation of a market within which these transaction costs will be greatly reduced is identified by Casson as a crucial entrepreneurial function. Casson emphasises that the most effective way of overcoming the obstacles to trade is not to proceed transaction by transaction but to make substantial investments in the creation of a system of conventions and rules; he therefore

associates market-making with the creation of a new business which is based on a new product. When, as is often the case, the entrepreneur's valuation of a specific productive opportunity is higher than that of any prospective purchaser of the rights to this opportunity, the costs of developing the opportunity can be recovered only by setting up a business, which entails further investment. What is produced must then be sold, and that requires yet more investment in creating a market in order to recover the previous investments.

Firms seek to create a market for their own products by making it easier for people to deal with them; and an initial commitment by the supplier is necessary in order to help the potential purchasers to close their decisionmaking model in favour of a purchase. What may be necessary to achieve this closure is apparent from Rogers' (1983) analysis of the factors affecting the diffusion of innovations. In addition to the relative advantage of the new product, which itself may be multidimensional and of varying relevance among potential customers, Rogers notes potential problems with the complexity of the product, its compatibility with the customers' current lifestyles and ways of thinking, the means of communication and persuasion, and the degree of commitment demanded of the consumer in order to sample the product. Early business computers illustrate all these difficulties, and it is easy (in hindsight) to see why the capabilities and established relationships of IBM gave that company substantial advantages in making that market. That customers should often be receptive to help from suppliers is very important; that is why the widespread reliance on representations and procedures adopted from others was emphasised early in this paper.

The link between cognition and institutions is crucial to the explanation of market-making. In developing its own organization and its particular market, each business draws on the institutions of the society within which it operates, and then develops, through a mixture of deliberate decisions and the consequences of day-to-day interactions, rules and conventions which serve to co-ordinate its activities and to align them with the activities of its suppliers and customers. Of course, not all businesses manage to create an appropriate set of institutions; they disappear. Other businesses are so obviously successful that rival businesses seek to copy or adapt their methods, both of internal management and of making markets. Of particular interest for this paper is the adoption of successful new market routines by others. Once it is clear that a significant number of people find the new institutional arrangements helpful, other firms look for similar ways of facilitating their own transactions. Thus the innovator's successful investment generates externalities, which are an important feature of institutional evolution; customers who have adapted to the new arrangements find it easy to transact with alternative suppliers in a similar way, and alternative suppliers can use the experiments of the pioneer in devising their own ways of encouraging transactions.

This widening of the scope of market transactions may benefit the original market-maker; indeed the innovator may encourage others to join in the creation of a new market, hoping not only to share the costs but also enjoying increasing returns from this enlargement of the market. Each present pattern of institutional arrangements originated in an idea for creating a market for a particular good or service, an idea for reducing transaction costs or creating transaction benefits, typically associated with a new kind of product (such as mass-produced cars or personal computers) or a new category of customer (such as American farmers far from any shopping centre or working families who wanted, and could afford, quicklyprepared meals). The eventual outcome is unlikely to be foreseen by anyone; it results from the interaction of many plans, in part conflicting but also in part complementary. But though prediction is hazardous, in explaining outcomes we should pay attention not only to the unintended consequences but to the plans which precipitated them.

Drucker (1964, p. 64) once defined the purpose of a business as the creation of a customer, that is, someone who will continue to buy from the same supplier. Such a continuing relationship, as is well known, reduces the costs to the supplier of subsequent transactions, and thus helps to recover the cost of the investment; but it is also a significant benefit to the customer, for it allows the management of future transactions of the same kind to be reduced to routine, and thus reduces their cost – in particular, as we shall note later, the opportunity cost of cognition. Marshall (1919, p. 182) noted that 'nearly everyone has . . some "particular" markets; that is, some people or groups of people with whom he is in somewhat close touch: mutual knowledge and trust lead him to approach them, and them to approach him, in preference to strangers. . . He does not generally expect to get better prices from his clients than from others. But he expects to sell easily to them because they know and trust him'. The costs of transacting within this special relationship are reduced for both parties. As a consequence both will have some disinclination to break it.

3 Evolutionary consequences of markets

3.1 Producers

The enormous volume of transactions in a modern economy is a consequence, not of the variation in original endowments, but of the division of labour; and those who have the greatest dependence on transactional efficiency for a particular commodity are those who specialise in that commodity, either as merchants or as producers. As Marshall (1919, pp. 271-274) pointed out, these are the people who have the greatest incentive to invest in the development of a particular market. One of Adam Smith's best-known principles is that 'the division of labour is limited by the extent of the market' (Smith, 1976b, p. 31); by reducing the cost, in money, time or trouble, which is borne by the customer in making a transaction the supplier can expect to extend that market, thus creating new possibilities for the division of labour. Making it easier for the customer to buy is therefore an important contribution to economic progress through increasing returns; and because this progress entails qualitative change and departures from equilibrium (Young, 1928, p. 528) there is a continual need to find ways of organizing new classes of transactions. '[T]he finding of markets is one of the tasks of modern industry' (Young, 1928, p. 536); it has been suggested

that Chamberlin's (1933) *Theory of Monopolistic Competition* is a theory of the search for customers (Robinson, 1970), and Chandler (1977, 1990) has emphasised the importance of investments in marketing, as well as manufacturing and management, in the development of large-scale enterprise.

Marshall (1920, p. 500) observed that every business needs to create both an internal and an external organization, which together provide frameworks for managing and developing the business. The external organization is not only a means of reducing transaction costs for products and services that are already well defined; it provides, as Marshall pointed out, two major contributions to the qualitative change which Young emphasised. It creates a selection environment within which each firm can carry out its own experiments with new products or new means of marketing; but it also gives access to knowledge on which to base these experiments. Prices are not sufficient statistics for those contemplating qualitative change. It is no accident that microeconomic theories of atomistic markets, which lack institutional features, provide an inadequate basis for analysing product innovation.

Marshall's recognition that most producers operate in both a general market and their own special market indicates the ambiguity of market definitions. This ambiguity has found no support among modern analytical representations of markets; yet it is a useful, as well as accurate, recognition for evolutionary economists. There are two linked causes of this ambiguity: the products on offer and the market institutions. However similar may be the products of rival producers, they will hardly ever be identical in the judgement of all potential customers, and neither will be the conventions and rules which govern the transactions between different producers and their customers. Yet this does not justify modelling this situation as a monopolistically competitive equilibrium. As Marshall noted, this kind of distinctiveness does not support a higher price; it provides an identity which supports transactions, and provides the friction which makes investment in new goods and services possible. Moreover, though there are incentives to differentiate in order to create and retain customers, there are also strong incentives to follow successful ideas for both products and market institutions – for cognitive as well as financial reasons. As with all innovation, the balance between novelty and continuity is crucial to success; but what balance will be successful differs from circumstance to circumstance in ways which, as we can see, are not easy to anticipate. It seems a good working principle to assume that any successful new entry changes, in some way, the definition of either the product or the institutions of a market – or both, since they are often interdependent.

An entrepreneur who cannot find a way of reducing the obstacles to trade may be unable to introduce the new product which she has created, in Schumpeter's (1934, p. 85) words, as 'a figment of the imagination'. Menger ([1871] 1976) noted that the choice of goods for commodity production was influenced by their marketability, to which he devoted a whole chapter, but instead of following that analysis with an account of market-making he concentrated on the very important special case of money as a means of reducing transaction costs. We shall comment on the importance of money from the consumer's point of view in the final section of this paper.

Market institutions and economic evolution

Marketability is not simply an inherent characteristic of a particular class of goods. It is subject to human action. Marshall (1919, p. 181) recognised that the division between production and marketing costs was somewhat arbitrary: product design and the manufacturing process are not irrelevant to both the supplier's and the customer's costs of investigating and deciding on a particular transaction, and the organization of the transaction is not irrelevant to the design criteria. The marketability of the product depends on the alignment of product, customer, and the institutions of the market, and that alignment can be influenced from each direction. This is even more obviously true of service industries. If one looks, for example, at the changes in the market institutions for financial services, it is clear that the products as well as the institutions have changed, and the primary enabling factor for these changes has been the development of novel transaction technology. This is nothing new: Marshall (1920, pp. 674– 675) observed that the principal factors in British economic progress had been developments in transport and communications, which, by reducing the costs of arranging and executing exchanges, had increased the scope for both specialisation and integration within the economy.

That there has been room for substantial innovation by suppliers in the organization of transactions is demonstrated by such developments as selfservice retailing, supermarkets, and telephone selling of insurance; there is currently much speculation about the potential of the internet for reducing the costs of individual transactions. Such innovations usually involve the substitution of capital costs for current costs, often taking the form of investment in knowledge which can then be cheaply reused. Each of these developments has entailed a substantial change in rules and conventions, which required a substantial investment by the initiating sellers, and the evolution of new market institutions was marked by the adoption and modification by each participating firm of arrangements that had been successfully introduced by rivals, as was suggested earlier.

3.2 Consumers

In the introduction to this paper I noted the cognitive limitations of human beings and the importance both of internal representations and external institutions in allowing us to economise this scarce resource. This complex structure of patterns and procedures, partly developed for ourselves and partly adapted from others, provides our cognitive capital. In a highly interdependent society, market institutions, by providing us with readilyusable knowledge about how to make particular classes of transactions, are substantial contributors to that capital; they constitute what we might call, borrowing from Marshall, our personal 'external organization'. What is particularly valuable to consumers is the producers' major share in developing these institutions, stimulated by the producers' incentives to make it easy for us to buy what they have to offer. Frequent transactions in particular markets lead to well-tried rules for action, and by helping us to discover who will serve us well (Hayek, 1948, p. 97) competition helps to simplify our decision making. Transaction costs are likely to be higher in less frequented markets, where there is consequently more scope for suppliers to benefit by offering to bear some of them, for example by free demonstrations, home trials, and money-back guarantees. The producers' initiative obviously carries risks of manipulation, which is occasionally spectacular; but we should recognise that the establishment of market institutions creates the possibility of developing skills in choosing – not for all products but for more than would be possible if we had to spend much more time in arranging transactions.

At this point we should return to Menger's explanation of money as a device for reducing the cost of transacting by eliminating the need for barter. This clearly releases time and cognitive resources; but it also leads to the formation of an elaborate system of money prices, and this is an institution which not only simplifies the process of exchange but also provides a numerical scale against which we can assess the value of any particular product, as Marshall duly noted. It thus helps us to develop a more coherent pattern of consumption without any need to make direct comparisons between goods which serve very different needs. The role of prices as conventions is much underrated in microeconomics. It is underrated in macroeconomics too; since changes in the price level occur through a succession of changes in individual prices, such changes undermine the usefulness of this convention, and people therefore have to devote their cognitive powers to the interpretation of particular prices, instead of interpreting them according to familiar routines, and so are unable to give much attention to improving their skills in consumption. Since price stability is an aid to skilful choosing, inflation reduces the rationality of choices.

In the present context, two functions of market organization are important. The first, and direct, function is to give us confidence in our transaction capabilities, allowing us to plan our consumption activities on the assumption that the transactions which may be necessary in order to carry them out will pose no particular difficulty. The importance of this confidence at once becomes apparent if, exceptionally, our plan requires us to transact in a market of which we have no experience and which we have no good reason to believe is like any market with which we are familiar; by contrast, a familiar and efficient set of market institutions gives us ready access to those who can supply us with what we may need. The second function is indirect; by allowing us to cope easily with transactions it frees our cognitive powers for other uses. Because we don't need to think carefully about how to transact, we can think much more carefully about what to transact, and what uses we can make of whatever it is that we choose to buy.

Individuals and households may be regarded as producers of consumption activities. However, instead of seeking to analyse these activities with the aid of a household production function, with the analytical baggage (or 'institutions') implied by that term, it will be more helpful to follow Penrose (1959) and Richardson (1972) by linking activities to capabilities, or skills and knowhow (for a more extensive treatment, see Loasby, 1998). Consumption activities require consumption capabilities. Capabilities, in Austrian terminology, are goods of higher order, which make certain first order goods attainable; they are also capital goods, which require investment, and thus the allocation of scarce resources. Stable institutions, among which market institutions are important, reduce other demands on these resources, and thus make possible the development of additional consumption capabilities.

People do not consume goods, or characteristics; they attempt to satisfy needs or solve problems, and in the process they may create new goods for themselves. Drucker (1964, p. 87) long ago observed that 'the customer rarely buys what the business thinks it sells' because customers and suppliers are thinking in different ways about different problems. We may add that different customers who are apparently engaged in identical transactions are often buying different goods, in Menger's sense. This is a major reason why the definition of goods, and of the markets in which they are traded, is ambiguous. To impose a list of goods at the outset of analysis is to exclude an important feature of economic evolution. Making more effective consumption choices and using products and services more effectively both require more than the acquisition of information to which a correct value can be assigned in advance; they entail an increase in knowledge, which cannot be known before it has been discovered, and in increase in the skills of certain kinds of decision making. Consumption capital is built up by forming connections and creating patterns, some of which allow particular groups of commodities to be treated for some purposes as homogeneous, while others become closely complementary. Like physical capital, consumption capital (and indeed all forms of human capital) is not well suited to aggregation; what matters is its structure and its orientation. The development of such capital is particularly likely to exhibit the features which Marshall (1920, p. 318) specified in his 'law of increasing return: an increase of labour and capital leads generally to improved organization, which increases the efficiency of the work of labour and capital'. (Consumer initiatives are explored in Bianchi, 1998.)

However, this improved organization imposes a framework which is not capable of rapid and substantial change; close complementarity which enhances efficiency is likely to reduce adaptability, except in favoured directions. The value of consumption capital may be destroyed by some kinds of change; indeed it may even be rendered negative. As in Schumpeter's (1934, pp. 79–80) account of the producer's plight when faced with the disruption of major innovation, '[w]hat was formerly a help becomes a hindrance'. The frictional value of institutions helps to avoid such destruction, though if the friction is very great it may, by preventing timely adjustment, allow pressures to accumulate which eventually precipitate a landslide of competencedestroying change. The continuing development of relevant capabilities requires variation within a stable ambience. Without variation there is no experience to act as a basis for learning; without a stable framework there is no assurance that any valid connections can be made between actions and outcomes that will have any future relevance. The appropriateness of institutions, including the institutions of many markets, to the maintenance of this balance is a major determinant of evolutionary pathways.

In an evolving economy we should not assume an unchanging set of preferences. Cognitive limitations imply that individual preference orderings are never complete and are quite likely to be unformed for goods or services that have never been considered for purchase. When products which are considered for the first time, either because they are new or because we now think that we can afford them, it is often the case that the process of choice defines preference, rather than preference defining choice (Woo, 1992). But it may also be true that a change in income may lead to a reconsideration of substantial parts of our lifestyle, and even to new ways of thinking about preferences (Maslow, 1970, p. 37). These new ways of thinking may well be partially adapted from other people, as, we began by suggesting, are many of the rules and conventions that we follow; they may very well be influenced by the institutions of the markets in which we are contemplating new kinds of transactions.

4 Conclusion

The evolution of economic systems depends on the tendency to variation, between individuals, between organizations, and between institutional arrangements. The institutions of each market provide a framework within which variations among suppliers can be introduced and tested by the responses of consumers, which may include direct comment as well as the potential information contained in their buying decisions; and the results of this testing, supplemented by other direct contacts between buyers and sellers - notably in industrial markets, which have been consciously neglected in this paper - provide the basis for informed conjecture by suppliers (though never rational choice) about new products or new services. The availability of markets, and therefore of transactions which make only limited claims on cognition, also encourages consumers to give attention to finding better ways of meeting their needs, sometimes through more roundabout means, and even of recognising needs that have hitherto been ignored, thus creating new goods. In turn these consumer innovations, and the enhancement of consumption capabilities, provide opportunities for innovations by suppliers. Thus a market is not an arena for the co-ordination of predefined supply and demand functions, but an institutional setting for the cognitive processes by which supply and demand are continually reshaped (Dubuisson, 1998, p. 86). Suppliers and consumers differ in their circumstances and in their interpretations; and these differences are reflected both in the options that they create and in the selections which they make among these options. Some innovations may require the creation of new market institutions, thus modifying the framework within which further innovation takes place. Economic evolution includes both evolution within institutional constraints and the evolution of institutions.

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