

ARE MARKETS LIKE LANGUAGE?

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Ludwig von Mises contributed much to understanding how markets work, of course, but he also showed a keen interest in language. I recall his mentioning, in two or three talks, the advantage for a scholar in economics and history, as he was, to be able to use research materials in more than just one or two languages. Economics and language as fields of study overlap in ways that give economists a legitimate interest in both. I'd like to develop this point before turning to the language-like aspects of markets, money, and prices.

Adam Smith ([1761, 1790] 1985) made conjectures about the origins of speech and writing and about how grammatically complex languages tended to grow more simple over time. Ludwig von Mises pursued his interest in language through many pages of his *Nation, State, and Economy* ([1919] 1983). He showed considerable knowledge of linguistics and language history. He explored how a standard language relates to its dialects. He explained, for example, how Vuk Stefanović Karadžić and Ljudevit Gaj, working separately, largely created the Serbo-Croatian standard language out of the existing dialects. He even made a prophetic remark (pp. 16–17) about how the language factor might lead the Slovaks to separate from the Czechs.

In particular, Mises explored relations between language and nationality. Why does a person identify himself (if he does) with a particular nationality? What is the essence of nationality? Not where a person lives, Mises said, not citizenship, not a shared history, and not race or ancestry. The nation is a speech community. "Community of language binds and difference of language separates persons and peoples" ([1919] 1983, p. 13). "A German is one who thinks and speaks German" (p. 13). Full mastery of a language, however, is not enough to define the speaker's nationality: he must speak it as his native language and must have "fully assimilated the special way of thinking that characterizes" it; he must process "everything he hears and sees in foreign languages through a way of thinking that has been shaped by the structure and concept formation of his own language" (p. 14). On such a definition, few persons belong to two or more nationalities, although some do. Occasionally, a person acquires an additional nationality or changes nationality.

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The Quarterly Journal of Austrian Economics vol. 1, no. 3 (Fall 1998): 15–27

Mises did not want actually to impose a close match of political with linguistic boundaries, but he recognized advantages of a common native language within a political unit. No group then has a language advantage in political dialogue, and no group feels condemned to perpetual minority status because of language. (I'll return to this point later on.) Mises had observed such difficulties in the polyglot territories of Austria-Hungary and eastern Prussia, where speakers of different languages were mixed together even within localities. "In polyglot territories, democracy seems like oppression to the minority" ([1919] 1983, p. 56). Mises argued that the language factor went a long way in explaining why political democracy never really flourished in pre-World War I Austria-Hungary and Germany.

For reasons like these, and also for cultural reasons, Mises sympathized with movements for national liberation and unity, even irredentism. As he explained, liberal nationalism—in contrast with militaristic and imperialistic nationalism—can be an admirable attitude and a bulwark of peace. Different peoples should be able to respect and even share in each one's pride in its own culture and history.¹

LANGUAGE AS SOCIAL SCIENCE

Both economics and linguistics can plausibly claim to be prototypical social sciences. Both investigate how people cooperate with one another and coordinate their activities. Both investigate instruments of communication (for, as I'll argue later on, markets, money, and prices do convey information, as well as incentives). F.A. Hayek observed that "In the field of social phenomena, only economics and linguistics seem to have succeeded in building up a coherent body of theory." Most of his remarks about economic theory, Hayek continued, "would appear to apply equally to linguistic theory" (1967, chap. 2, pp. 34–35). Hayek used language as a prime example of how people can come to follow rules that few could state explicitly. In words that make us think of Noam Chomsky's work, Hayek emphasized the striking "ability of small children to use language in accordance with the rules of grammar and idiom of which they are wholly unaware" (*ibid.*, chap. 3, p. 43). Language illustrates the transmission of culture from generation to generation. A process of selection occurs through which "those modes of conduct prevail which lead to the formation of a more efficient order for the whole group, because such groups will prevail over others" (Hayek 1978, p. 9). Economic institutions and language alike, along with ethics and the common law, illustrate what Hayek, following Adam Ferguson, called "results of human action but not of human design" (1967, chap. 6); both illustrate spontaneously evolved phenomena that yet are open to deliberate modification.

¹Difficulties with Mises's definition of nationality do come to mind. To his own satisfaction, he handled the cases of one language serving as the mother tongue in two or more countries, of dialects existing in parallel with a standard language, and of countries with two or more language communities. He explained why Switzerland, with four languages, is not an embarrassing counterexample. However, my purpose is not to pursue the question of nationality any further here.

Linguistics has further claims to being a prototypical social science. Language is material for cultural anthropology. Language affinities provide clues to homelands, migrations, technologies, and other features and events before history became written. Linguistics seeks uniformities amidst diversities; it propounds hypotheses; it develops laws.

Sir William Jones, a British judge in India, published in 1786 his discoveries of systematic resemblances among Sanskrit, Latin, and Greek. He conjectured about the relations among these languages, about a common ancestor of them and other language families, and about processes of linguistic change.

Grimm's Law describes a whole series of sound changes as the Indo-European ancestor language evolved into Greek, Latin, and the Germanic languages and made those languages diverge from one another in systematic ways. Laws of the High German sound shift codify several systematic deviations between English and other Germanic languages on the one hand and modern standard German on the other. The individual Romance languages have diverged from their Latin ancestor in ways characteristic of each language. Their divergences exhibit systematic patterns and lawlike regularities.

These phenomena lead into the point that linguistics, like economics, employs methodological individualism. Both social sciences try to trace their laws to the circumstances and actions of individuals. Linguistics seeks to explain changes in language by their physiological and psychological convenience for the individual speaker in the environment confronting him. This environment includes the sounds used in his language and other circumstances that I'll mention.

The linguist André Martinet devotes sections of one of his books (1972, chap. 6) to the economics (or economy) of language and the costs of accomplishing its functions. These are communication primarily, but also sociability and play. To explain language traits and their changes over time, he invokes such ideas as George Zipf's "principle of least effort." Briefly, people try to accomplish the functions of language at lowest cost. The costs are efforts in positioning the vocal organs, in remembering sounds, words, meanings, and grammatical features, and in attending to messages received. A trade-off operates between precision and ease of use. Having very many units of sound and meaning helps make communication precise; on the other hand, fewness of such units, along with analogies among those that do exist, helps make the language easy to use.

The specific features making for ease of use depend on the environment confronting the speakers of a particular language. This environment consists of the whole body of its already existing features, including patterns suggesting psychologically appealing analogies of sound, meaning, and grammar. The environment also includes the objects and relations that people want to talk about, such as natural and social conditions and technology, as well as other languages that speakers of the particular language come in frequent contact with. Slurring over distinctions and using abbreviations becomes most tempting or economical for sounds and expressions in frequent use. *Chemin de fer métropolitain* became *métro* (so-called in

Washington, D.C., as well as in Paris). All this is explainable broadly in terms of economy or cost-saving relative to effectiveness.

INDIVIDUAL AND SOCIETY

Language is a prime example of the sense in which the individual is a product of his society. The example is relevant to political economy—the area of overlap among economics, political science, and philosophy—and to questions of a suitable blend of individualism and communitarianism in the shaping of institutions and policies. In these interactions, language and ethics display parallels; and related questions concern, for example, life-styles and role models for youth growing up in poor communities.

All the words and meaning and structure of a language existing at a given time were contributed by individuals, mostly members of earlier generations. Each person grew up “into” an already functioning language. It shaped his thoughts, values, and activities. Words convey moral appraisals—for example, “murder,” “shabby,” “pig-headed,” “tenacious,” “principled.” Without using socially given words and sentence structures, each of us could hardly think or reason at all. Yet, language results from the interplay of individual minds. Each individual and perhaps each generation has been influenced more by language than he or it has influenced language. Yet it, like moral traditions, is the creation of all individuals, past and present. (Here I have been paraphrasing Mises’s friend Henry Hazlitt (1964, p. 167). It is noteworthy that Hazlitt applies methodological individualism to an unquestionably collective phenomenon.)

Recognizing the individual as a social product in no way denies that happiness and misery, success and frustration, are experienced by individuals; there is no such thing as collective happiness distinct from and transcending the happiness of individuals. Recognizing how society shapes its members in no way imposes collectivist or communitarian rather than individualist thinking and policies.

COMMUNICATION AND COORDINATION THROUGH LANGUAGE AND MARKETS

The role of prices in communicating knowledge enters into Mises’s analysis of why accurate economic calculation is impossible under socialism. Without meaningful prices, planners could not calculate the cost of producing various quantities of any particular product. Cost means, ultimately, the value to consumers of alternative outputs sacrificed to produce the particular product. Planners in a nonmarket economy could not compare the costs and benefits to be expected from producing it in various quantities. Numerical data, especially market prices, are necessary for calculation; qualitative information is not enough (Salerno 1993, p. 121). Without genuine exchanges of factors and genuine market determination of their prices, central planners could not “cost” resources and allocate them efficiently or purposefully (*ibid.*, p. 130). Quantitative results—suitable product and factor quantities—presuppose quantitative inputs. These must include, somewhere in the calculation process, the numerical

specifics of utility and production functions. But these, along with the qualitative information that is also necessary, could never all be available for centralized, nonmarket decisions.

Hayek elaborated on Mises's analysis; at least that is how I interpret Hayek's contribution. He stressed

the fragmentation of knowledge and its dispersion among the multitude of individual consumers and producers as the primary problem of economic and social cooperation and views the market's price system as the means by which such dispersed knowledge is ferreted out and communicated to the relevant decisionmakers in the production process. (Salerno 1993, p. 115)

Surely, in my view, no sharp contrast is warranted between attending to the fragmentation of knowledge and focusing "on monetary calculation using actual market prices as the necessary precondition for the rational allocation of resources within an economic system featuring specialization and the division of labor" (*ibid.*, p. 125). Both paradigms, as Salerno calls them, enter into a full description of the problem and process of economic calculation.

Market prices, though essential to calculation, are not ultimate data. They represent intermediate steps in taking account of the more nearly ultimate data, often summarized as "wants, resources, and technology." "Costing" of output in a particular line of production requires somehow ultimately taking account of innumerable bits of information about production opportunities and processes in innumerable lines of production and information about consumer tastes for all sorts of products. In the words of Israel Kirzner (1996, p. 150), calculating the worth of a prospective action requires knowing "the importance to others of the goods and services one commits to that action, and the importance to others of the goods one will obtain from that action."

Already, it is clear that the calculation problem cannot be distinct from the knowledge problem.

The planners would need to know more than the technical aspects of production and more than the actual and potential tastes of consumers and workers. Efficient use of resources would further require using what Hayek (1945) called "knowledge of the particular circumstances of time and place." Examples are knowledge of a machine often standing idle, of whom to call on for emergency repair of a leaking boiler, of an employee's skills that could be put to more valuable use, of stocks of materials that might be drawn on during an interruption of supplies, of empty space in a freighter about to set sail, and of fleeting interlocal differences in commodity prices. Such localized and temporary knowledge can be used only by decision-makers on the spot, and would go to waste under centralization.

But decentralized decision-makers cannot work with this particular knowledge and technological knowledge alone. Efficient decisions must also take account of conditions in the whole rest of the economic system—the availabilities and value-productivities of resources in the innumerable lines of production

competing for them. Here, Hayek's story portrays the price system as a vast computer and as a communicator of information and incentives, in abbreviated form, to all consumer and business decisionmakers to whom particular bits are relevant. Here, also—if the example were not already so familiar—would be the place to recite Hayek's example of the role of changed prices in motivating appropriate responses to an increased scarcity of tin, whatever caused it.

Markets convey information through prices in ways that resemble how language conveys information. But prices are not the whole story of how markets convey and mobilize information. Gluts and shortages of goods and services and undesired buildups and rundowns of business inventories become directly evident to market participants and motivate them to take action. In the imaginary world of abstract theory, the functions of the omniscient "Walrasian" auctioneer include not only establishing a general-equilibrium pattern of prices but also putting would-be trading partners into contact with one another and conveying information to each about the others' wants and capabilities. Not even in Walras's own writings, actually, does such a prodigious auctioneer exist. In reality, entrepreneurs ferret out lapses from what the auctioneer would have accomplished and try to remedy those lapses at a profit. Employment agencies, credit-rating companies, the general and specialized media, standard-setting and product-testing bureaus, wholesalers, department stores, franchisers, insurance companies, and all sorts of other firms perform information-mobilizing functions, besides taking part in establishing and responding to prices.

I can say more about how the market system puts knowledge to use by setting straight a common if vaguely expressed misunderstanding of Hayek's celebrated 1945 article, which I have already been drawing on. That misunderstanding has Hayek claiming that prices convey all the information necessary for well-calculated economic decisions. He does not claim that. He knows as well as anybody that prices are no substitute for knowledge of production techniques and of "the particular circumstances of time and place." I have already mentioned examples of such knowledge, and have explained why putting it to use requires decentralized decisions. Instead of being conveyed by prices, that local and fleeting knowledge is reflected in the actions of its possessors. Of course, those actions both affect and are affected by market conditions. And market conditions are often a sign of *disequilibrium* prices.

But prices do convey much information, though not all, as is also true of language. They play a coordinating role. Current prices, which really are prices of the very recent past, are never completely correct in the sense of being solutions to a general-equilibrium system. Furthermore, they are mere clues, though indispensable clues, to what really counts: the prices that will prevail in the near and the more remote future. Entrepreneurs have incentives, however, to perceive and act on and thereby reduce price discrepancies, and to foresee the future correctly; and the profit-and-loss system works to weed out poor entrepreneurs and leave the administration of resources more in the hands of the perceptive ones. In this way, too, as Mises explained, the market makes knowledge available and puts it to effective use.

LANGUAGE AND MONEY

I have been taking it for granted that prices are prices expressed in money. Their functions would be much impaired if prices were expressed in hodgepodes of barter exchange ratios. Mises's analysis of the role of prices in economic calculation under capitalism and socialism presupposed that prices were money prices.

Economists have long noted a close analogy between language and money. Joseph French Johnson did so in 1905:

Just as language is a medium of exchange of ideas, so is money a medium of exchange of goods and services. Money performs its work by virtue of its exchangeability, and like language is in common use. Universal aphasia would have very much the same effect upon conversation that fluctuations in the value of money have upon the production and exchange of wealth. (Johnson, p. 172, quoted in Dorn 1987, p. 4)

James Tobin noted that the analogy is a

time-honored observation of monetary economists. . . . Both are means of communication. The use of a particular language or a particular money by one individual increases its value to other actual or potential users. Increasing returns to scale, in this sense, limits the number of languages or moneys in a society and indeed explains the tendency for one basic language or money to monopolize the field. Theory must give way to history in explaining which language and what money . . . are adopted in any given community. (1980, pp. 86–87)

By a "particular money," Tobin evidently means (or should mean) a particular unit of account—dollar, franc, or whatever. Using different media of exchange, like banknotes and checking accounts of different banks, causes no great problem. The linguistic analogue of a unit of account is a particular language in the abstract—its vocabulary, grammar, and idioms. Particular documents and speech recordings correspond better to media of exchange.

Tobin noted (p. 87) that arbitrariness and circularity affect the acceptability of money, as the analogy with language suggests. Almost regardless of why a particular language or a particular money has become preeminent in particular territories or activities, that preeminence tends to reinforce itself. The main reason becomes obvious when one considers the position and choice of the individual user.

Kevin Dowd and David Greenaway (1993) examine how the individual's choice of a currency depends on the private benefits of using it, the network benefits (or external benefits, which hinge on the extent of its use by other people), and the costs of switching from one currency to another. They plausibly conjecture that marginal network benefits, though remaining positive, diminish with the size of the network. Though their article pertains to money only, its concepts apply rather obviously to language also.

Charles Kindleberger (1976), writing before the Bretton Woods system collapsed, drew the analogy between dominant languages and dominant currencies in international use. He mentioned English and the U.S. dollar. Costs of translation are a kind of transactions cost; they include loss of time or accuracy and loss of

intimacy in communication. World efficiency requires all countries to learn the same second language, Kindleberger thought, just as the different nationalities of India use English as a *lingua franca*. The desire of the French to re-enthroned gold reminded him of wanting to resurrect Latin for international discourse. Flexible exchange rates would resemble a return to Babel, with foreign languages used by none save professional interpreters. The questions of optimum currency area and optimum language area are analogous. The optimum language and currency areas today are not countries nor continents, but the world. So said Kindleberger, calling for keeping the international dollar standard, which had evolved spontaneously anyway, just as the international role of English has evolved. I cite his essay and the one I'll mention next not to agree with everything in them but further to illustrate how economists employ the analogy between money and language.

Robert Barro invoked the analogy in a different spirit from Kindleberger; he pointed out what he considered some undesirable aspects of European monetary and political unification. I'll quote but mostly paraphrase from his 1992 article. Settling on a single language would eliminate translation costs. These savings would be far greater than the savings achieved by a common currency. Even so, small nations are often willing to bear high costs to promote their distinct languages, as in Catalonia and Quebec, which suggests that people there see real benefits in preserving a local common heritage linked to language. The benefits from maintaining national currencies might be much smaller than these cultural benefits and even yet outweigh the savings in transactions costs that a single currency would achieve. (Barro thus implies that the savings in transaction costs would be relatively slight.)

Monetary unification has costs of its own, Barro continued. It

contributes to the centralization of government more broadly: It represents a repression of national identity that could also be applied to language, culture, per-capita incomes, the extent of public-sector activity, and so on. The appeal of a single currency is like the superficial attraction of central planning. . . . In both situations, the benefits from central planning are exaggerated and the rewards from competition are underestimated.

What is the ideal size of a country and, relatedly, the ideal domain of a language or a currency? Barro thought it best to avoid both extremes: "a single world government with one language and one currency and a proliferation of thousands of countries, each with its own media of speech and exchange."

MONEY AS A CLEARING DEVICE

Money, like written language, is a record-keeping device or, more exactly, a device for decentralizing and simplifying record-keeping. As such, it facilitates the clearing of multilateral exchanges. Clearing enables a person or firm to apply claims earned by delivering goods and services to some trading partners to pay for goods and services obtained from others. In a simple example (Schumpeter

1970, p. 227), a surgeon operates on a singer, the singer performs at a lawyer's party, and the lawyer handles a case for the surgeon. If their services had equal value, the three persons might arrange to avoid actual payments to one another by canceling out their claims and obligations.

"Open stockpiles," as Robert Kuenne (1958) calls them, would be unworkable—letting each person contribute to and draw on the economy's total flow of production as he saw fit. Transactions must be identified somehow. Without clearing or some substitute, each person would have to pay for goods or services acquired from each trading partner by supplying that same partner with goods or services of equal value. Even though trading partners might avoid having to make their deliveries at the same time by granting each other short-term credit, this bilateralism of transactions would still be restrictive and inefficient.

The clearing of multilateral transactions requires somehow monitoring each person's contributions to and withdrawals from the flow of production to keep them in balance (with qualifications about trade in old goods, credit, gifts, and the like). If gathering and transmitting information (including information about the relative values of things), monitoring transactions, and keeping records were much easier and cheaper than they actually are (and if the Big Brother aspects were not ominous), centralized clearing could work.

In reality, decentralization by using money is cheaper and more efficient. Schumpeter calls money a "receipt voucher" for productive contributions and a "claim ticket" on goods to be received in exchange ([1917–18] 1956, pp. 154–55 and *passim*). Having money is presumptive evidence of being entitled to withdraw goods of equal value. To call money a clearing device—or, equivalently, a substitute for centralized clearing—is not to deny its function as medium of exchange; it is to examine that function more deeply. Money facilitates multilateral transactions because it is a relatively cheap and easy way of keeping track of who is entitled, on market principles, to acquire how much of various things. Money does what would otherwise be done more inefficiently by language, that is, by centralized and explicit written records.

We should not forget this prime function of money in the modern world by being too preoccupied with how money first evolved, correct though Carl Menger's story is. To suppose that the essence of a developed institution remains specified by its most primitive form, its genesis, is to commit the "genetic fallacy." "Money is not a commodity—not even when it happens to consist of a valuable material" (Schumpeter [1917–18] 1956, p. 161). It is a technical device for facilitating trade.

Yet some people overlook this central role as a clearing device and fall into thinking of money's ancient commodity aspect as somehow its essence. They exaggerate the supposed necessity of some ultimate or base money and worry about great structures of credit or claims pyramided onto a narrow base. They tend to think of deposit banking as a method of economizing on base money, and they worry about only fractionally backed deposits. These intuitions may apply to some monetary institutions, but not to money in general.

Instability in the value of money tends to be subversive of calculation and coordination, much as instability in the meanings of words would be. For this reason, economists tend to favor institutions that preserve the value of money. Linking money to gold may be useful, as Schumpeter thought, to restrain the government from abusing the monetary system. Even so, sound analysis requires remembering how money resembles language more than it resembles gold.

IMPAIRMENTS TO COORDINATION

Language difficulties provide examples of non-monetary impediments to coordination, perhaps in instructive contrast with monetary disturbances. Quebec law required, until its recent modification and with only minor exceptions, that outdoor advertising and other signs appear in French alone; and a provincial agency wields various incentives to promote the use of French even inside business firms. Such legislation must impair economic coordination to some extent, perhaps especially in cities bordering on English-speaking Ontario; and a clever researcher might devise ways of estimating how severe the effect is. I conjecture that any measurable effect would turn out to be slight in comparison with other impediments to coordination—in particular, with monetary disorders that render existing prices wrong. Non-monetary sources of disruption, such as language problems, are easy to diagnose. They come with built-in incentives for individuals to devise ways around them. The same is less true of monetary disruptions. But whether or not language barriers are found to cause serious disruption, the finding should be of interest to economists.

Incidentally, even substantial disruption would not unequivocally condemn Quebec language policy. The policy provides an interesting case study in political economy—in the issue of what should be done when individual rights and collective rights, as we might call them, are not fully compatible with one another.

AN INTERNATIONAL AUXILIARY LANGUAGE AND “CONSTRUCTIVISM”

An auxiliary language is one created for use in international organizations and conferences and other international communications; it is not meant to replace national languages among their native speakers. Economic considerations, broadly considered, recommend adopting one. It could save most of the costs of working with and interpreting and translating among multiple languages. Being simpler, more regular, and easier to learn than any national language, dead or living, and being distinct from each of them, an auxiliary language would go far toward overcoming language barriers. Yet, it would be neutral, not favoring any particular nationality. (Remember Mises’s related point about the disadvantage that linguistic minorities feel within individual countries.)

The concept of network effects, which I mentioned earlier, makes us wonder, though, how such a language could ever catch on. What reason would anyone have

to learn it before a great many other people were already using it? Who would have any reason to go first?²

However, I'll stick to my theme of interrelations between language and social science. The question of an auxiliary language can be a focal example for discussions about the respective merits of spontaneously evolved versus deliberately contrived institutions, including economic and political institutions. Hayek has emphasized the unarticulated wisdom, the product of centuries of piecemeal sifting, that may be embodied in "the results of human action but not of human design" (1967, chap. 6). He has applied the epithet "constructivist" to schemes for overambitious social reconstruction. Some other members of the Austrian School have even distorted Hayek's insights into an actual criterion for appraising institutions and reforms. Ones that did evolve or could have evolved spontaneously as outcomes of social natural selection are supposedly meritorious for that very reason; others (notably some proposed monetary reforms) are "constructivist" and therefore bad. Some other economists have criticized Hayek because they think, wrongly in my view, that he did advocate spontaneous evolution as an actual test of desirability.

Charles Kindleberger has picked up this theme (although not, I suppose, directly from the Austrians). He says (*ibid.*, p. 8) that "to seek to use newly-created international money or a newly-created international language would be patently inefficient." The analogy with Esperanto suggested to him the futility of a synthetic, deliberately created international medium of exchange. (Esperanto, by the way, is not the same thing as Interlingua, and is even something of an embarrassment to Interlinguists.) A linguistic expert might devise a better common language than Esperanto, he said, and something similar applies to Triffin's and others of the monetary reform plans in circulation when Kindleberger was writing. In his view (p. 10), however, all share the basic weakness of not growing out of the day-to-day life of markets.

But what is so decisively good about growing out of day-to-day life? Distinctions must be drawn; equating "spontaneously evolved" with "good" and "constructivist" with "bad" is simplistic. Institutions and practices that no one deliberately devised, even ones whose rationale no one has yet fully perceived and articulated, may indeed embody time-tested wisdom. Social scientists should treat them with a certain humility, instead of pushing to replace whatever they do not understand with some reformer's bright idea. On the other hand, no existing institution or practice is properly immune, merely on grounds of spontaneity and longevity, from investigation, appraisal, and modification or replacement. To tear down all of a society's institutions and rebuild from scratch according to a rational

²Here I am tempted to put in a plug for Interlingua, explaining why it is useful even to the individual learner, quite apart from any network benefits it might provide later on as more and more people came to use it. In particular, Interlingua is already useful for communicating with many millions and perhaps hundreds of millions of speakers of Spanish and other Romance languages, most of whom have never even heard of it. And it is a means to a deeper grasp of the international vocabulary of science and technology and to the vocabulary of one's own language. (Information is available at www.interlingua.com.)

blueprint is indeed hubris. Quite different is assessing existing individual institutions and improving them piecemeal in ways found consistent with the healthy aspects of existing society.

Interlingua is far from an arbitrary invention. In standardizing existing languages and the already existing vocabulary of science and technology, the linguists who developed it paid scientific attention to the natural processes of linguistic evolution.

Many national languages are deliberate standardizations in that same general sense. The efforts of the Académie Française are well-known. Modern German arose as a kind of interlingua among medieval dialects. Serbo-Croatian resulted, as Mises observed, from two scholars' deliberate efforts to standardize the Illyrian and other South Slavic dialects (Mises [1919] 1983, p. 18). The resurrection and modernization of Hebrew as a spoken language traces to Eliezer Ben Yehuda, who immigrated to Palestine in 1881 and imposed the language, then spoken by him alone, on his wife and son (Masson 1983, esp. p. 454; several other articles accompanying Masson's in a three-volume set also cover the general theme of this paragraph). Turkish exhibits deliberate reforms undertaken under Kemal Atatürk. Modern Rumanian derives from efforts of nineteenth-century scholars and literary figures to standardize the dialects and enrich the result with borrowings, notably from French and Italian. Deliberate steps toward standardizing literary Italian on the basis of the Florentine dialect date back to the founding, probably in 1582, of the Accademia della Crusca, so called because its members sought to sift bad from good usage. For centuries, Italian was the language of only a small minority. Outside Tuscany and Rome, only literate people knew it; and in 1861, when the Kingdom of Italy was established, nearly four-fifths of the population were illiterate, and only around two-and-one-half percent could speak Italian. As late as 1951, the vast majority of Italians were still bilingual, most speaking a dialect as their first language. Publishing, motion pictures, and other cultural and political factors continue, however, giving the standard language momentum over the dialects (Migliorini and Griffith 1984, pp. 228, 352, 356, 363, 417, 510–12, and *passim*).

The upshot? I am not about to be intimidated by charges of "constructivism" either in language or in economic institutions.

In conclusion, I do not claim that markets, money, and prices are *just* like language but they do share some functions. All are instruments of what Mises called social cooperation. All help coordinate activities which are dispersed over space and time; all help mobilize knowledge and use it effectively, as in economic calculation. Language, markets, and money are prime examples of the largely spontaneous and only partly planned evolution of useful but often improvable institutions. Some analogies, particularly between money and language, are illuminating. They concern, for example, how dominance tends to reinforce itself through network effects, and how money facilitates multilateral clearing of exchanges through serving in effect as a monitoring and record-keeping device. More broadly, economics and linguistics have as much in common as probably the best-developed

branches of social science. Economists may legitimately pursue an interest in language.

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The Korean Journal of Defense Analysis

A Semiannual Journal of Defense

PUBLISHER	Hyung-Sun Kim
EDITOR-IN-CHIEF	Changsu Kim
EDITORS	Bon-Hak Koo, Young-Sun Song, Kang Choi
EDITORIAL MANAGER	Joon-Lai Cho
COPY EDITOR	Eugene Craig Campbell

The Korean Journal of Defense Analysis (ISSN 1016-3271) is published twice a year by the Korea Institute for Defense Analyses (KIDA), Seoul, Korea. The Journal is circulated free of charge to institutions and analysts concerned with Asian and international security affairs. To request a copy of the issue or to be placed on the Journal's mailing list, please write to KIDA directly.

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