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Knowledge and  
Coordination  
*A Liberal Interpretation*



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## GLOSSARY

- Asymmetric information:** You and I having different sets of information, as when I do not get to see your cards.
- Asymmetric interpretation:** You and I having different interpretations. We might have the same information, but you alone might see a great opportunity by virtue of an interpretation not in my intellectual portfolio. Asymmetric interpretation seems to be an essential ingredient in humor; every joke, it seems, provides an illustration of asymmetric interpretation.
- Coincidence of interest:** You and I have a coincidence of interest if in promoting my interest, I also promote your interest, as when I avoid colliding with you or I work to complete a voluntary exchange with you. This is not to say that our interests coincide perfectly or entirely.
- Common knowledge:** Something is common knowledge among a set of people if everyone knows it, everyone knows that everyone knows it, everyone knows that everyone knows that everyone knows it, etc. Game theorists often assume common knowledge among players to give closure to the model and, thereby, impose symmetric interpretation among the players.
- Concatenate coordination:** A concatenation is said to be better coordinated if its components or elements find an order more pleasing or desirable according to some relevant standard. Concatenate coordination was what economists, including Simon Newcomb, Friedrich Hayek, and Ronald Coase, usually meant by “coordination” from the time that the term first found usage in economics in the 1880s until the 1970s.
- Concatenation:** A series of interconnected or interrelated things, activities, or events; a chain, order, netting, or constellation of such things.
- Convention:** A way of acting or behavior regularity in a recurring situation, a regularity corresponding to a coordination equilibrium in that situation. Driving on the right is the convention in the United States.
- Cooperation:** You and I cooperate if we have a common awareness of our working together. It can be parsed in terms of the two coordinations: The mutual coordinating of each one’s actions in a context in which each cooperator perceives himself to be contributing to the same referent concatenation. There is mutual consciousness of each one’s contributing to the pleasing concatenation. The spirit of cooperation is especially pronounced when there is not only mutual awareness but also mutual sentiment: “We did it together!”
- Coordination:** It is important to distinguish between *concatenate coordination* and *mutual coordination*. In virtually any social setting they coexist, for they are two different ways of thinking about doings. For concatenate coordination, the

perspective is synoptic, beholding the whole concatenation of actions, whereas mutual coordination builds from the several perspectives of the individuals doing their activities. Concatenate and mutual are two different sets of lenses, entailing different rubrics of ideas.

- Coordination equilibrium:** In a game-theoretic model, an equilibrium is, in the purest sense, a coordination equilibrium if and only if no player can make *any* player better off by deviating from the coordination equilibrium. Thus, there is mutual coordination in the equilibrium. But a coordination equilibrium is not necessarily a very good outcome. It may be a coordination equilibrium for Americans to use the Imperial system of weights and measures, but those conventions are inferior to the metric system. Also, note that coordination equilibrium is far from synonymous with Nash equilibrium: Every coordination equilibrium is a Nash equilibrium, but not every Nash equilibrium is a coordination equilibrium.
- Correction:** For a mistake, correction can be fixing in the instance, as with a typo. For an error, correction may entail contemplation resulting in reformulation or reformation of one's habits, routines, relationships, purposes, or interpretations—leading, one hopes, to better judgment.
- Decision (as opposed to Choice):** Again I quote Kenneth Burke (1932/1966: 215): “If decisions were a choice between alternatives, decisions would come easy. Decision is the selection and formulation of alternatives.”
- Deepself:** A “society of mind” approach to the human being, with asymmetric knowledge within the being. Most importantly, the approach sees the human being as layered but with neither an uppermost nor a lowermost layer or level. Thus it rejects flattening the human being down to a machine or mathematical function (man as “Max U”), even one that is multileveled.
- Disappointment:** A sentiment arising from things not going as expected or planned. Being disappointed is different from regretting the plan itself. Disappointment does not imply regret, and regret does not imply disappointment.
- Discoordination:** In the context of mutual coordination, this term means failure to coordinate our actions, as when each of goes to a different place when trying to meet up; it would not mean coordinating on an inferior outcome (such as meeting on a rainy street-corner). In the context of concatenate coordination, this term means an upset to the workings of the system. I wonder whether it would be useful to use “discoordination” when thinking of mutual coordination and “malcoordination” when thinking of concatenate coordination. Thus, we would describe universal defection in a prisoners’ dilemma game as malcoordination but not as discoordination, since mutual coordination is not even possible. Also, in a coordination game, we could describe an inferior coordination equilibrium as malcoordination, but not as discoordination. Discoordination would be reserved for outcomes like our failing to meet up at the same place (an outcome that, in a concatenate light, could also be called malcoordination).
- Discovery:** Coming to new knowledge. The new knowledge may be more a matter of a new interpretation than a matter of new pieces of information.
- Disjointed knowledge:** Knowledge that is fragmented, which means asymmetric in either or, more likely, both information and interpretation.
- Dovetailing:** In woodworking joinery, a dovetail joint is a joining of two pieces, usually in a perpendicular configuration, such as two walls or two sides of a drawer. At the joint, the end of one or both of the pieces resembles a dove’s tail.

This joining has served as a metaphor for meshing or interlocking activities, as when we say that our plans dovetail—a usage found extremely infrequently in the writings of Hayek but more frequently in Kirzner and others. The dovetail joint can be interpreted alternatively as a sort of mutual coordination, if we imagine the two pieces of wood as shaping themselves so as to be snug with one another, or as concatenate coordination, in that the joint makes for a sturdy building or drawer. Whereas Kirzner (2010) has invoked the dovetail joint as a primary metaphor for what he means by “coordination,” my view is that, while the dovetail joint nicely highlights the co-existence and even interrelation of mutual and concatenate coordination, it does not represent a coherent, separate, third notion of coordination.

**Efficiency:** Increasing the ratio of output to input, as with the efficiency of an engine. Defined this way, usage of the term would seem to imply a pretty exact idea of the output and the input.

**Emergence, emergent convention:** Emergence implies that the emergent things come into view by their own force, as when baby sea turtles emerge from the sand. Conventions are emergent when they come into prominence by the growing practice of such convention, by “catching on,” as opposed to by central direction or imposition. Note that, as with the QWERTY keyboard, it is the *adoption*, not the composition, of the rule or standard that is said to be emergent.

**Entrepreneurship:** I associate entrepreneurship with the discovery of nonobvious opportunity, rather like Kirzner does. That association is useful for appreciating liberty, but other associations are useful for other purposes.

**Epiphany:** In comic strips, when a character has this experience it is represented by a light-bulb flash over her head. It is coming to an important new and better interpretation, and hence an opportunity, that was not obvious. It is the kind of discovery most appropriately associated with entrepreneurial discovery.

**Error:** A course of action about which you feel you should have known to do otherwise; an action that gives rise to regret—if not actual regret, then potential or vicarious regret.

**Facts:** When you and I converse, we treat a statement as factual if we mutually understand that we both accept and use it; we care about the statement, and we do not care to take issue with it.

**Flat-talk:** Discourse that flattens knowledge down to information.

**Focal point:** A feature that from its salience, prominence, uniqueness, or conspicuousness is focal, and that people in the context expect to be mutually focal and hence as quite possibly effective in mutually coordinating their actions. Focal points are sometimes called Schelling points.

**Hayek, Friedrich A. (1899–1992):** A social philosopher born and raised in Austria but who spent most of his career in Britain, the United States, and Germany. Originally a soft socialist, he converted to liberalism during his early twenties, influenced particularly by the writings and personal influence of Ludwig von Mises. In 1974, Hayek was a co-recipient of the Riksbank Prize in Economics in Honor of Alfred Nobel.

**Hume, David (1711–76):** A Scottish moral philosopher and good friend of Adam Smith. The most characteristic feature of his writings, in my view, is his remarkable understanding of ideas under the rubric of mutual coordination (including focal points and convention). He tended to interpret features of the

world through that lens, including causation, ownership, voluntary agreement, justice, political authority, human identity and human consciousness.

**Impartial spectator:** Adam Smith's term (in *The Theory of Moral Sentiments*) for the imagined beholder of the whole, whose judgment is impartial and is presupposed by all of us to be worthy of our sympathy and allegiance. In this book I have dubbed the impartial spectator "Joy." We disagree in our characterizations of Joy, but we agree to a set of conversational ground rules that presuppose a single Joy universal to all of us (though recognizing the historical and contextual particularity of the circumstances of the individual actions judged of). The impartial spectator is not one's conscience, which Smith rather calls one's "representative" of the impartial spectator, but rather more like the unreachable ideal: one's conscience's conscience's conscience's . . . conscience.

**Incentive:** An incentive is articulable, and, hence, perhaps manipulable, as within a means-ends framework that is commonly understood—as opposed to *motivation*, which suggests more subterranean sources and vaguer aims.

**Information:** Facts as they are understood through the basic or working interpretation.

**Interpretation:** A way of understanding or reading the facts. Different interpretations give rise to different arrays of information.

**Invisible hand:** Without anyone guiding, superintending, or possibly even minding the overall coordination of the concatenation, its many constituent actions nonetheless advance its coordination as though directed or induced by a wise and benevolent god-like being. Like *spontaneous order*.

**Judgment:** Taking stock in certain interpretations by acting on them—that is, by judging them to be worth investing in. The action facet of knowledge.

**Kirzner, Israel M.** (b. 1930): The leader of the wing of Austrian economics that tends to homogenize Mises and Hayek. A protégé of Mises at New York University, Kirzner has focused on entrepreneurial discovery as the driving force of economic progress. In my view, and in my terminology, Kirzner's great contribution has been to defy the flattening of knowledge down to information by highlighting how liberal policy conduces to better interpretations and the realization of opportunities with wide social benefits. For more than four decades, Kirzner led a program in Austrian economics at New York University, where he is now professor emeritus.

**Knowledge:** We know more than we can tell, and what we can tell is not merely a matter of information, but also interpretation and judgment.

**Liberalism:** By "liberalism" I mean a rather libertarian political sensibility akin to the original liberal persuasion, particularly as it existed in Britain (as opposed to the Continent, where *liberalism* was more associated with notions of revolution and matters of political form and participation), emerging especially in the eighteenth century, perhaps best represented by Adam Smith, and politically by Liberal Party politicians Richard Cobden, John Bright, and William Gladstone, and pervasively understood in the Anglosphere merely as "liberalism" up to the end of the nineteenth century and in much of the world still today.

**Liberty:** Others not messing with one's stuff.

**Minsky, Marvin** (b. 1927): An American cognitive scientist and leader in artificial intelligence. Among his works is *The Society of Mind* (1986).

**Mistake:** A slip-up, as by a subordinate who executes badly. Like a typo.

- Mises, Ludwig von** (1881–1973): An epic figure in the drama of human liberty. During the 1930s he was driven from Austria and settled in New York in 1940. He propounded liberalism and his system of economics or “praxeology,” which was fashioned as a deductive, categorical science based on axioms such as “Man acts.” In Vienna, he greatly influenced the young Friedrich Hayek, and in New York he was mentor to many students, notably Murray Rothbard and Israel Kirzner.
- Motivation:** Motivation is not necessarily articulable or manipulable—as opposed to *incentive*.
- Mutual coordination:** We mutually coordinate our actions when we drive on the same side of the road; or use the same word, such as “apple,” to refer to an object; or use the same medium of exchange. Our actions mesh according to a situational coincidence of interest. Mutual coordination is generally manifest from the interactor’s point of view. The ideas of mutual coordination came forward especially with Thomas Schelling’s book *The Strategy of Conflict* (1960) and the rise of game theory. Nowadays, it is what economists usually mean by *coordination*.
- Path-dependence:** The dependence of the current set of alternatives on past circumstances or decisions that are otherwise no longer relevant. Technological standards are often said to be path-dependent, in that once a standard catches on, the practice of it becomes the cause of its own perpetuation. From path-dependence, inferior conventions can become locked in. There is mutual coordination, but concatenate coordination is lacking relative to what would be the case with a superior standard or convention. Path-dependence and lock-in are more important in matters of culture, politics, and morals than of technology.
- Plan affirmation:** Looking back on the plan and affirming the plan or the decision to pursue it; not regretting it, not feeling as though it was an error. Plan affirmation does not imply plan fulfillment.
- Plan fulfillment:** Things going pretty much as planned. The plan is fulfilled. Plan fulfillment will not necessarily be accompanied by plan affirmation. Even a fulfilled plan might be regretted.
- Polanyi, Michael** (1891–1976): A Hungarian-British polymath who wrote about spontaneous order in *The Logic of Liberty* (1951) and the richness of knowledge in *Personal Knowledge* (1962), *The Study of Man* (1963), and *The Tacit Dimension* (1966).
- Regret:** Wishing you had done things differently, a sentiment most relevant when you feel that you *could* have done things differently. Feeling that you erred.
- Response:** Perceiving and responding to incoming bits of information that one was not searching for, as when one notes useful information shown in a billboard while driving along on a highway. Response does not involve major interpretive shifts. It is like *search*, except that search is the active pursuit of information, such as looking up a phone number, while response is passive, as useful information just comes your way.
- Rothbard, Murray N.** (1926–95): A student of Mises in New York, Rothbard was from an early age an ambitious and prodigious polymath, working to erect axiomatic and paradigmatic systems in political ethics and economics—both based explicitly on the distinction between voluntary and coercive action—all woven together, along with bold interpretive scholarship in political, economic, and intellectual history, to offer a libertarian (even anarchist) political worldview.

His economics follow and develop Mises' praxeological approach. Like Kirzner, he fashioned and nurtured an Austrian economics; his brand is centered on Mises and, if only implicitly, on Rothbard himself, whereas Kirzner has worked to integrate Hayek more centrally into a set of tenets deemed Austrian. Many of Rothbard's followers today tend to dehomogenize Mises and Hayek, and prefer Mises. Rothbard saw Hayek and himself as the leading representatives of rival visions for liberalism in his times. Rothbard has been a much more important figure than is generally recognized; a great many Austrians and libertarians are influenced more by Rothbard than by Mises, Hayek, or anyone else, but trade externally on labels and figures that soften and obscure Rothbard's radical politics and rationalistic approach to policy and ethical discourse.

**Schelling, Thomas C.** (b. 1921): An American economist who has developed and explored most of the important elements of strategic and situational analysis, many of which were later distilled in game theory. His book *The Strategy of Conflict* (1960) contains (among much else) the seminal exposition of many of the ideas of the mutual coordination rubric, including focal points. The book also grapples with issues of asymmetric interpretation, as it explores how people interpret a situation differently, based in part on things that a formal analysis might regard as incidental or unimportant features of the setting. Focalness is a matter of interpretation and, as such, is not amenable to formalization. Thus his book stands as something of a critique of attempting to flatten matters down to symmetric interpretation or common knowledge. Like Adam Smith, Schelling infuses his terms with meaning by rich illustration and application. His book *Micromotives and Macrobehavior* (1978) develops ideas later discussed as path-dependence and lock-in of conventions and technological standards. *Choice and Consequence* (1984) contains two essays that discuss self-command problems by thinking of the human being as a multiple-self; these essays were significant in getting economists to think beyond the consistent, integrated agent. In 2005, Schelling was a co-recipient of the Riksbank Prize in Economics in Honor of Alfred Nobel.

**Search:** Actively hunting down bits of information within a working interpretation (whereas *respondence* is passively receiving and responding to incoming bits).

**Self-reproach:** A sentiment arising from error and impelling correction.

**Serendipity:** The discovery of an opportunity involving a major interpretive shift that, in the context of discovery, is obvious to the discoverer—as opposed to *epiphany*, which is nonobvious.

**Smith, Adam** (1723–90): The Scottish moral philosopher whose two principal works were *The Theory of Moral Sentiments* (1st ed. 1759, 6th ed. 1790) and *The Wealth of Nations* (1776).

**Spontaneous order:** An order (or concatenation) whose overall coordination is without central direction or superintending; usually said of an order that impresses in its coordination—whether that of the molecules in a crystal or snowflake, or of the activities in the free-enterprise economy. In public policy argumentation, the relevant frame for “spontaneous” is typically that of more or less free; governmental restrictions are thus said to make the order less spontaneous, and liberalizations more spontaneous.

**Symmetric information:** Information whose exposure and possession is symmetric. In chess, information is symmetric. In bridge and poker, information is asymmetric.

## GLOSSARY

**Symmetric interpretation:** Two people who interpret an affair or set of statements the same way have symmetric interpretation. The common-knowledge assumption in model building is the imposing of a sort of symmetric interpretation among the agents of the model.

**Sympathy:** The mutual coordination of sentiment.

**Synoptic:** A description or account is said to be synoptic if it covers the whole, front to back, beginning to end. The description is not necessarily detailed, but it gives a complete account of things it accounts for. A table of contents is a synoptic account of the book's contents. We evoke a synoptic view of a concatenation when we speak of its coordination.

**Transcendence:** Moving up to a higher or superior interpretation.