which the reconciliation of alternative strategies and directions in
the making of such experiments, rather than the simple maxi-
mization of free trade, becomes the commanding principle of the
global trade regime. It must also be one in which the universaliza-
tion of ever more exacting labor standards generalizes upward
pressure on returns to labor to the whole of the world.

In Search of a Point of View

To find an intellectual direction that can illuminate these historical
experiences and clarify these conceptual problems, we must think
beyond the boundaries of ideas that address free trade alone. We
cannot do justice to the debate about free trade and protection
from within the categories in which this debate has traditionally
been framed.

In this chapter I offer six ideas as starting points for a way of
thinking, not just about international trade but also about eco-

nomic activity in general—building blocks for a different
approach. Without a struggle to develop such an approach, my
explanatory accounts and programmatic proposals about the
world division of labor would be groundless and arbitrary, or
they would be condemned to remain parasitic on the terms of a
controversy that has long become sterile.

Each of the first three ideas informs one of the main theses
I put forward in the next chapter. The fourth idea makes explicit
an assumption on which two of the first three rely. The fifth idea
is the one that has the most far-reaching theoretical and practical
implications for the debate about free trade, yet also has the least
obvious connection with it. The sixth idea puts the previous five
in the context of a broader view of mind and work.
Specialization and Discovery: When Competition Inhibits Self-Transformation

The first idea addresses the countervailing interests at stake in the debate about free trade. It is an idea about collective learning and about the difference between the circumstances in which uncontrolled competition with more advanced competitors encourages learning and the circumstances in which such competition prevents learning. This first idea amounts to an interpretation of what the classical quarrel over free trade was always about, restated in the language of concerns that contemporaries have come to view as paramount.

To become specialized in particular lines of production, on the basis of natural or achieved comparative advantage, and yet to be goaded into improvement and innovation by continuing contact with more advanced producers—with those who produced more value with less labor—whether in those lines of production or in other lines requiring greater capital and knowledge: such was one of the essential benefits of free trade, according to the classical doctrine. Under competitive pressure, you would learn, as a country, as a sector of the economy, or as a firm, to do better what you already did, or to make something new that the world valued more. The daily realities of trade with those who produced different things, as well as of competition with those who produced the same or similar things, would constantly present you with inspirations and incentives to self-improvement.

The efficiency that you achieve through specialization within an international division of labor will help you progress, both by improving how you produce what you already produce and by showing you how to move from one line of activity to another, more gainful and more demanding of capital and skill.

The core of this first idea is that there are certain recurrent situations in which this dream is likely to be realized and others in which it is just as likely to be frustrated. The difference between these two sets of situations turns on the relation in each of them among three conditions: the benefit of becoming specialized, the value of being challenged, the danger of being overwhelmed.

There are two polar situations in which the dream can be most readily realized: when your trading partners are much more advanced than you are and when they are more or less as advanced as you are. If they are much more advanced than you are, you can hope to become more efficient and productive—especially by moving into more labor-saving lines of business or forms of production—without either threatening them or being threatened by them. The constant example of their organizational and technological refinement, made patent in the daily realities of trade, will hold before you a standard that, although it may be unreachable in the short term, will nevertheless mark the direction in which you should move.

Now consider the situation when your trading partners are at a level of development—and especially of command over capital, knowledge, and the replacement of repetitive labor by machines—similar to your own. Once again, as in the circumstance of radical inequality with your trading partners, the benefits of specialized production need not be enjoyed at the cost of the possibilities of self-improvement. You and your trading partners may at any moment enter into one another’s lines of business. This ceaseless competition will make its victims: the firms that stand to lose their lead, and all the workers they employ. Nevertheless, in the face of these localized, shifting, and ephemeral defeats, you and your trading partners alike will be able to draw on a common stock of resources: the capital, the machines, the skills, the practices, the organizational arrangements, and the enacted ideas that place you and them at a comparable level of development.

But what if you and your trading partners are at unequal—but not very unequal—levels of development? In particular, what if you are the relatively more backward economy and your partners are the relatively more advanced ones? Your paths are then much more likely to cross theirs than they would be if the difference in development between you and them were stark. The situation will in this respect more closely resemble the circumstance of relative
equality: you will have the prospect of moving into lines of business in which they hold strong, even entrenched places.

However, the situation will differ from that circumstance of relative equality in two important ways. For one thing, in the course of your advance you will have to cross a dangerous terrain of transition during which you may have to compete in certain fields of production without enjoying the same productivity of labor as your relatively more advanced competitors. You will consequently be forced to rely on cheap labor. You will do so in the hope that this reliance will not prevent you from continuing to move up the ladder of labor-saving technology and organization.

For another thing, you will be less able to draw on the resources that enable your partners, in their dealings with one another, quickly to replace failure in one domain with success in others. Your stock of resources and capabilities for such substitutions will be more restricted. You may be forced to fall back on the relative cheapness of your labor as your sole compensation. It will be a perilous reliance because it may tempt you to slow or to postpone the adoption of labor-saving technologies and practices. As a result, you may take longer to shift the focus of time and attention in your society away from the activities you know how to repeat, and therefore know how to embody in formulas and machines, toward those activities that you have not yet learned how to repeat. Yet it is precisely this shift, from repetition to novelty and to the power of creating it, that matters most to the ability of a society to respond to the failure of an established line of production by replacing it with something else.

Your relatively more advanced trading partners will also be threatened. Your forced reliance on cheaper and less productive labor will crack a whip usefully at their backs, forcing them to quicken the pace by which formulas and machines come to replace whatever part of labor and production they have learned how to model as a set of repetitious operations. However, the social cost of this acceleration will not be evenly distributed throughout their societies; it will fall most heavily on the part of the labor force doing the work that the catchers-up have now taken up as their own. If the victims fail to react successfully, economic growth will go on under the shadow of increasing inequality and exclusion. If the victims do react, economic growth may be interrupted by social strife.

What this thought experiment suggests is that the different elements of collective learning, in and through competitive specialization under an international division of labor, are not foreordained to work with one another. They may work against one another. The likelihood of their working in one way rather than another will be shaped by the relative powers of whole national economies as well as by the relative capabilities of particular firms. The greatest tension—productive of an antagonism of interests that the dogmas of free trade may be unable to resolve—will arise when inequality among the partners is real but not radical: when the emergent face the established.

Politics over Economics: When Restraints on Trade Imply No Surrender to Special Interests or Costly Dogmas

A second idea concerns the relation between economics and politics. The range of alternative lines of response on which a society can draw when confronted by dilemmas such as those exposed by the first idea is not determined within the economy itself. It is determined by politics. More precisely, it is formed by the combination of two distinct but connected factors, both of them political in nature.

One factor is the extent to which the state is able credibly to represent the wide interests of society at large rather than the narrow interests of a faction or a class with privileged influence on government. The second factor is the degree to which the practices of politics and of policy, giving content to the conception of the collective interests, are experimental in character, organizing a process of sustained social discovery of ends as well as of means, of values as well as of interests, of collective self-understandings as well as of national strategies.

The creation of such a state and of such a practice of politics and policy is unfinished business in the historical experience of
humanity. Even the most vibrant democracies in the most egalitarian contemporary societies realize this ideal very imperfectly. At their most egalitarian, those societies continue to be shaped by a coexistence between class and meritocracy, with vast disparities between the power and influence of different groups. At their most vibrant, those democracies continue to rely on a narrow stock of institutional arrangements and ideas, limiting their ability to subject social privilege to popular pressure.

Public administration continues to be organized on a model of command and control: the administrative equivalent to mass-production industry, with its stark hierarchies of conception and execution, its rigid contrasts among specialized jobs, its trust in standardization as the condition of efficiency achieved through scale, its segregation of cooperation and competition into wholly separate domains of experience, and its treatment of innovation as episodic interruption rather than ongoing practice. It is as if warfare had continued to be dominated by the massed and brittle infantry formations of the eighteenth century. As a result, the making and implementation of policy cease to be sources of discovery, and become instruments for the imposition of dogma, top down.

These constraints on democratic deepening and administrative practice radically limit the range of options with which a society can respond to problems and tensions like those that the first idea identifies in the relation between the benefits of specialized production and the requirements of economic self-improvement. They force a country to make a Hobson's choice between relinquishing all restraints on free trade, even when relative advantage may justify such restraints, and imposing the restraints at the risk of allowing them to serve powerful interests and costly dogmas.

The accumulation of such Hobson's choices becomes a kind of fate, unconsciously accepted as the closed horizon within which practical argument about economic policy must move. Even if selective and temporary restraints on trade may seem justifiable in theory, they will be denounced in practice as an invitation to the evils of playing favorites and of riding hobbyhorses instead of letting the market discover the most efficient solutions. The result will be a utopian view of the market economy as a machine capable of discovering Pareto-improving solutions through decentralized experimentation, so long as it remains free of discrete instances of market failure.

The counterpart to this utopian view of the market is a dystopian view of the state—and of all forms of collective action not governed by market forces, a view seeing government and collective organization undisciplined by the market as tools of special interest and factional prejudice. The utopian and the dystopian views work together, lending credence to the belief that the political adjustments of economic forces that may seem best in theory will rarely be best in practice. In no field is this lesson more insistently urged than in debates about international trade.

Consider now the relation of these background assumptions to the traditional debate about free trade and protection. Restraints on free trade, so the argument goes, may be justified in theory—for example, by considerations such as those that underlie the first idea or by any of the traditional justifications of protection developed in the course of the long history of debates about free trade. However, all such restraints amount to exercises of political selection trumping a resource allocation generated by the market—the market as it is presently organized. Selective tariffs are, in one fundamental sense, like selective interest rates or selective exchange rates, or selective subsidies. They ordinarily serve a factional interest: whatever interest, or combination of interests, succeeds in winning power or influencing government. They will give voice to dogma: whatever belief about national development enjoys the prestige of passing fashion. The factional interests and the prestigious dogmas are all too likely to converge—the former speaking in the language of the latter—to the detriment of the collective stake in unrestrained competition and surprising discovery.

The extent to which selective policy, including selective protection, represents an invitation to the twin evils of favoritism and dogmatism is not, however, invariant. It is a variable. It varies according to the institutional arrangements that organize government and policy making. To gain an initial impression of the significance of such variation, we require no broader view of the
alternative ways in which democratic politics, market economies, and free civil societies might be organized. All we need is an open- 
minded appreciation of variations that already exist.

For example, the northeast Asian economies of the latter part of 
the twentieth century were famously adept at the centralized 
formulation of trade and industrial policy, for the most part top 
down, by a national bureaucracy. To a large extent, this approach to trade 
and industrial policy remained in the grip of dogma, immune to 
experimental challenge and revision and therefore susceptible to 
costly mistakes. However, even within this narrow historical sample 
the infirmity was not uniform: it beset Korea, for instance, more 
than Taiwan because policy making in the latter engaged a wider 
circle of small and medium-sized firms than it did in the former.

When we turn from the danger of riding hobbyhorses to its 
twin, the peril of playing favorites, we find that a shared character-
istic of the northeast Asian “tiger economies” of the second half of 
the twentieth century was their half-conscious attachment to a 
particular way of weakening the influence of powerful factional in-
terests over public policy. The distinctive character of the approach 
they embraced stands out very clearly by comparison to the direc-
tion taken in most of the Latin American countries of the same his-
torical period. In those societies, the traditional forms of liberal 
democracy, imported from richer and less unequal societies, were 
unable effectively to channel the political energy of the people and 
consequently unable as well to prevent the periodic suppression of 
republican institutions. No independent bureaucracy with any 
substantial autonomy from the plutocracy, or from the other pow-
ervul interests in societies, could form and gain strength in such an 
environment. Government was for the most part too “soft”, too pli-
ant to these interests, to subordinate them to a strategic vision.

By contrast, the northeast Asian economies saw the implementa-
tion of trade and industrial policy on the basis of limited or guided 
democracy and more generally of a form of education, culture, and 
consciousness discouraging nonconformity. The state was relatively 
“hard.” Its hardness enabled it to limit its vulnerability to the evil of 
dogmatism, but at a mounting cost. Authoritarianism in politics 
and antiexperimentalism in culture limited the ability of society to
and public blindness. The flaw is that this view disregards or downplays existing as well as possible variation in ways of organizing politics and policy. Whether a form of selective policy that may appear attractive in principle will also prove superior in experience may depend on where it fits in a spectrum of alternative methods and arrangements—or on whether its architects succeed in broadening this spectrum.

The theoretical and practical significance of this point increases vastly when we connect it with a more general idea. The idea is that the forms of representative democracy, of the market economy, and of free civil society now established in the rich North Atlantic countries represent a subset of a larger and open-ended set of institutional possibilities. There is no direct or self-evident passage, by way of either analytic inference or evolutionary constraint, from the abstract conception of a representative democracy, a market economy, or a free civil society to any of the particular sets of contingent institutional arrangements with which such institutional abstractions have been historically associated. The chance that a form of selectivity that appears to be best in theory may also be, or may become, best in practice now appears a corollary of this general proposition.

However, the institutional arrangement of the market is not at the same level, or does not have as much importance, as the institutional organization of democracy. The market cannot create its own presuppositions, including the institutions and practices by which it is organized and the endowments of the individuals who move within it. It is politics—in the large sense of the contest over the terms of social life as well as over the mastery and uses of governmental power—that determines these presuppositions. Politics, by contrast to the market, does create its own presuppositions—it crowns itself—although it does so within the constraints imposed by the stock of available resources and ideas.

From this line of reasoning, it follows that the extent to which what is best in theory can also be best in practice is set outside the economy. The contingent limitations of politics and policy making shape it. The deepening of democracy, through the renovation of its institutional forms, increases the likelihood that what is best in theory—for example, the restraints on trade that may be justified in the circumstance of relative backwardness—may also be best in practice.

A discussion of trade policy—or indeed any other branch of practical economic argument—that leaves politics out will not simply be incomplete. It will inevitably lead to misleading conclusions. However, we cannot fill this gap by importing ideas from political science; the established political science is, for the most part, like the established economic analysis. It is deficient in the quality that we now most require: the denial to the established ways of organizing markets and democracies of their mendacious semblance of naturalness and necessity. Unable to rely on a ready-made alternative intellectual practice, we must develop the practice we need as we go along, from the inside out and from the bottom up.

Order and Revision: When Free Trade Strengthens the Capacity for Self-Transformation

A third idea has to do with the relation between the way a trading regime develops and the ability of the participants in such a regime to change themselves. A remarkable feature of the established way of thinking about free trade is that it treats these two processes as unconnected, except to the extent that more trade is supposed to bring about faster improvement under the prodding of specialization, competition, and emulation.

Suppose, however, the following contrary hypothesis. For any given level of trade or free trade, the trading regime may be so designed that it either strengthens or weakens the capacity of the trading partners to reorganize themselves, experimentally, as they go along. The constraint on self-transformation addressed by this hypothesis is not the constraint resulting from a given degree of openness to trade, as measured either by the level of protection or by the relation between a country's aggregate trade flows and its gross domestic product. It is the constraint resulting from the particular way a trading regime is organized, at whatever level of openness it may provide. What matters, from the standpoint of this hypothesis, is not how much free trade but what kind of free trade.
Consider a simple example, of great theoretical and practical importance. It rests on an assumption about the open-ended diversity of possible forms of a market economy. This assumption forms the core of one of the recurrent ideas in my argument. As a system of free trade develops, its rules may impose on the participants in the trading regime a particular version of the market economy: a definite approach to the content, sources, and scope of contract and property rights, a way to uphold the barrier separating government from private enterprise, and even a certain treatment of the rights of investors and shareholders.

The result will be to associate the advancement of free trade with a narrowing funnel of institutional convergence among the trading partners. It will be to restrict their capacity for self-revision except insofar as self-revision results from greater freedom to trade. The evolution of a trading regime may also follow an opposite tack, putting institutional minimalism in the place of such an institutional maximalism; it may prefer arrangements that leave the greatest possible latitude open to the trading partners in deciding what type of economy—indeed, what type of market economy—to establish.

This room for institutional divergence among the trading partners, built into the rules of the trading regime, will in turn increase the likelihood that the trading system will itself require more complication and permit more revision: ongoing experimentation with the rules of the worldwide trading system as well as with the institutional arrangements of each trading partner. Instead of organizing trade among trading partners that are more and more alike, it will have to organize trade among partners that are persistently or increasingly different, in their practices and institutions as well as in their endowments and specializations.

The core of this third idea is that we should never think about free trade simply in the one dimension of relative freedom to trade and of restraint on trade. We should think of it as well in a second dimension: at whatever level of freedom or restraint, how much freedom for self-revision does the trade regime grant to the trading parties and how much restraint on self-revision does it impose on them.

In principle, the best type of free trade will be the type associating more free trade with more opportunity for self-revision. The worst type will be the type connecting more free trade with less opportunity for self-revision. The first type will promote the market-based logic of decentralized experimentalism in one dimension while undercutting it in another. The second type will express in both dimensions the same experimentalist impulse.

Consider this notion in its most generalized form, as an idea about practices, institutions, and assumptions in general rather than merely about trade or even about the economy as a whole. We can distinguish two classes of activities: the ordinary moves we make within a framework of assumptions and arrangements that we take as given, and the extraordinary moves by which we challenge and revise pieces of such a framework.

The distance between these two classes of activities may be greater or smaller. The framework may be organized to resist criticism and change and to win for itself a semblance of naturalness, necessity, and authority. It may begin to seem part of the furniture of the world; the structures it establishes will then seem as if they were natural facts rather than the frozen fighting and the petrified inventions that all social structures really are. A social or natural calamity may be needed to change such an order and to rob it of its delusive semblance of naturalness. Catastrophe will become the requirement of transformation.

By contrast, the framework may be organized to facilitate its revision and diminish the dependence of change on crisis. The distance between our context-preserving and our context-changing moves will then shrink. Changing the context, step by step and piece by piece, will become part of our normal activity.

Our stake in moving from the first situation to the second, from the naturalization to the denaturalization of the institutional and cultural settings in which we think and move, is deep and pervasive. It touches on our most fundamental interests. It is causally related to our economic interest in being able more freely to recombine people and resources: our practical experimentalism remains limited so long as we are prevented from experimenting with the setting within which, and with the practices by which, we
experiment. It has a causal connection to our social interest in the disentanglement of cooperation from social division and hierarchy: no system of social division and hierarchy can remain in place that fails to prevent the arrangements and presuppositions on which it depends from perpetual questioning, tinkering, and attack. It directly expresses our spiritual interest in being able to participate, wholeheartedly and even single-mindedly, in a social world without surrendering to it our powers of criticism, resistance, and transcendence.

When we understand and practice the freedom to recombine factors of production only within an institutional organization of production and exchange that we accept as the natural or necessary form of a market economy, we impose on the exercise of this freedom an arbitrary and burdensome restraint. It remains caged within a structure that fails to bear the imprint of its spirit or to do justice to its potential. Once deepened or radicalized, freedom to recombine factors of production for the sake of greater efficiency or total factor productivity would come to include a freedom to rearrange and renovate the arrangements forming the institutional setting of production and exchange. Different regimes of private and social property might, for example, coexist experimentally within the same market economy.

Translated into the conception of a regime of international trade, this approach to thinking about an economy results in the proposition with which I began the statement of this third idea. The best such regime will be the one that, at any level of the freedom to trade for which it provides, also imposes the least restraint on the ability of its participants—trading economies as well as individual firms—to reorganize themselves.

Alternative Free Trade, Alternative Globalizations: The Market Liberated from the Doctrine of the Market

A fourth idea concerns the relation between the concept of a market economy and the institutional arrangements by which it is organized. More generally, it addresses the relation between abstract institutional concepts, such as the market or democracy, and their tangible institutional expressions. This fourth idea is a presupposition of both the second and the third ideas; I have anticipated it in the course of presenting them. Until we appreciate its force, we cannot hope to rid ourselves of the superstitions that confuse debates about free trade.

The gist of this idea is that the market has no single natural and necessary form. No ideal limit exists to which market economies around the world must, should, or could converge. If convergence occurs in one historical period, it will be reversed in another; it will lack a basis in deep-seated and universal forces.

The principle bears generalization: it applies, in a similar way, to all other abstract institutional ideas: for example, the idea of a representative democracy. The meaning we habitually ascribe to any such institutional conception or ideal will be the product of a double reference, to a set of interests, values, or aspirations—an understanding of our collective stake in the institutional project that the notion evokes—and to a set of concrete, contingent arrangements with which we ordinarily associate the conception or ideal.

So long as practical and ideological conflict fails to escalate, the two references will appear to form a seamless whole: the stake we have in the idea will seem naturally expressed in the particular arrangements with which we associate it. This impression of seamlessness, however, is only an illusion, made possible by relative stagnation. Under the pressure of escalating practical or ideological strife and invention, we come to recognize that the familiar institutional vehicle could be stretched in different directions and changed in different ways. The changes in the institutional vehicle in turn make us aware of tensions and ambiguities in the interests and in the ideals that seemed naturally and necessarily realized in the established arrangements. What appeared to be a unity begins to unravel, in the mind and in reality.

Not only is there no single natural and necessary way in which a market economy can be organized, there is also no closed list of possible types of a market economy, or of a representative democracy, or of a free civil society, or indeed of any general institutional
project. All such projects remain subject to the potential disharmonies and transformations of the double reference. What we face is a penumbra of possibility around present and past experience; getting to somewhere else from where we are now, by taking steps within our reach.

The idea that the market economy has no single determinate expression in law or institutions is an old insight. In fact, it may have been the single most insistent revelation to have resulted from the evolution of legal thought in the West from the middle of the nineteenth century to the middle of the twentieth. Early nineteenth-century jurists had set out to demonstrate that a single coherent and gapless system of rules of private law, and of supporting public-law institutions, could be derived by quasi-deductive inference from the abstract idea of a market or of a free society.

However, in trying to confirm this proposition, the jurists established its opposite: their self-subversion was the badge of their seriousness. Contrary to their aims, they ended up showing that at each step toward greater institutional detail, the institutional abstractions whose supposedly predetermined content they had set out to reveal could take different turns. Each of these turns would have different consequences not only for the distribution of wealth, income, and opportunity but also for the organization of economic growth and popular government. Which turns were to be preferred was not something that could be established by analyzing the idea of a market or the concepts of property and contract; the choice depended on conjectures, informed by inconclusive experience. It had consequences for the struggle for wealth, income, and power. It required taking a position in a contest of visions of the possible and desirable forms of social order and experience.

Insight into the institutional indeterminacy of the market economy formed a vital part of the conceptual background to a momentous turn in the legal thought and practice of the twentieth century. You could not have a free society by simply clinging to a foreordained system of private rights. It was necessary to ask who in fact had the opportunity and the means to exercise the rights.

The rights depended for their reality on conditions that might fail—indeed, regularly did fail—to be satisfied: the requirements for their practical enjoyment might be missing, or denied to large classes of people. Thus all law, including the law organizing the market economy, would have to be dialectically arranged into two parts. One part would consist of rules and arrangements organizing individual initiative. The other part would ensure that inequalities of power, of wealth, information, access and opportunity never became so extreme and entrenched as to turn the first half of the law, the half shaping the exercise of individual self-determination, into a sham.

This dialectical reorganization of the law came up against a limit, of efficacy as well as of insight, that it has yet to overcome. A society can take different directions in identifying and overcoming obstacles to the reality of the rights of economic freedom. By taking one direction rather than another it becomes one kind of society, one kind of economy, one kind of market order rather than another.

The simple idea that the market economy can assume different legal and institutional forms, that it has no single natural and necessary expression, has never fully penetrated, to this day, the practice of economic analysis and the course of policy debate. It is to be distinguished from the recognition of specific market failures resulting from inequalities of power and asymmetries of information. Moreover, it leads directly to the conclusion that in dealing with a market economy we are not restricted to regulating it or to compensating for its inequalities, after the fact, through redistributive tax-and-transfer. We can reshape it, changing some of the rules and arrangements that make it what it is.

Thus developed, awareness of the diversity of institutional forms of a market economy has two applications to the debate about free trade in a global economy.

The first application has as its subject the idea of the international trading system as a regime of free trade among economies that are themselves free; that is to say, market economies. It is an application to which we come by combining two ideas. One is the idea of the diversity of institutional forms of a market economy.
Another is that free trade regimes may differ in the freedom of self-revision that they allow to their participants. At any given level of openness to trade, the more freedom of self-revision, the better.

No experiment with a particular line of production within a market economy is likely to be as important as experiments about the organization of a market economy. Instead of meaning ever fewer restraints on commerce among institutionally convergent market economies, free trade can come to mean less restrained commerce among institutionally divergent market economies. I have described the grounds for preferring this latter project to the former.

The second application of the idea of the institutional indeterminacy and diversity of the market has as its subject the world trading system itself. If a market economy can be organized in different ways, so can a universal order of free trade among market economies. Under such a revised view of increasing economic openness in the world, countries do not undertake to obey an institutional formula, of either international trade or national economic organization, simply because they have committed themselves to become and to remain market economies.

The effort to develop an open world economy has the same characteristic with which the jurists of the nineteenth century had to contend in their own effort to translate the abstraction of a free economic order into legal and institutional detail: you cannot justify the choice of one route over another by claiming that it is the market route. There are too many market routes. You need a view of the relation of trade to growth, and of growth to other interests and values. You need such a view as much to work out the conception of universal free trade as to define the organization of a market economy in any one country.

We are not limited to having simply more market or more regulation and command, according to the simple hydraulic model that has been the obsessive theme of ideological debate for the last two hundred years. We can reimagine and remake the market economy. Similarly, globalization, which has free trade as its practical and conceptual core, is not there on a take-it-or-leave-it basis. We are not confined to having more of it or less, to making it go faster or slower. We can have it on different terms, but only by changing how we understand and organize free trade.

The Division of Labor Reimagined and Remade: From the Pin Factory to the Factory of Innovation

A fifth idea addresses the division of labor. It considers the division of labor at any scale and scope, all the way from the division of labor at a work station, in a factory, a shop, or an office, to the division of labor in a global economy. Worldwide free trade among countries, on the basis of specialized production and natural or achieved comparative advantage, is, after all, a species of the division of labor. Our assumptions about the division of labor inevitably inform our ideas about international trade. We need to correct some of those assumptions.

The pin-factory model of the division of labor that we trace back to Adam Smith and that found its most fulsome expression in Henry Ford's assembly line no longer does justice to the realities and the possibilities of what is sometimes called the "technical" division of labor: the way work gets organized at the work station. We can best understand that model as the limiting case of a much broader range of ways of organizing work. Having wrested ourselves free of the stranglehold of that limiting picture, we can come to see the division of labor in a different light, and revise our view of what makes some of its forms more promising and productive than others. This insight in turn changes how we think about international trade.

In Adam Smith's fabled pin factory, the division of labor took the form of a rigid specialization of tasks, under stark hierarchical supervision. The counterpart to rigid contrasts among specialized tasks in the making of pins was the equally stark opposition between those who commanded or monitored, from on top, and those who obeyed, at the bottom, endlessly repeating their appointed rounds.

Such a way of organizing work seemed justified by irresistible advantages. A worker could become proficient at one maneuver rather
than being indifferently skilled at many. That most valuable of resources, time, could be saved by avoiding the need to move from one task to another. The point was to use repetition to save time.

The pin-factory model of the division of labor gained much of its appeal from its implicit connection with a particular view of the constraints on economic growth. According to this view, widely shared up to the twentieth century, the most important of such constraints was the size of the surplus society extracted and reserved over current consumption. The surplus might well have to be extracted coercively; according to Karl Marx, the continuing need for coercive surplus extraction was one of the major justifications not only of the capitalist mode of production but of all class society. The pin-factory approach to the organization of work has been seen as a tool of discipline and repression. It was supposedly needed to impose the sacrifice of present individual pleasures for the sake of future collective wealth.

This view, however, was already anachronistic and misleading when it was first proposed. We know now that the pioneering countries of the “industrial revolution” in late eighteenth- and early nineteenth-century Europe were not distinguishable from China at that same period by a higher level of saving; Europe’s saving level was lower than China’s. They differed by dint of a practice of intellectual, technological, and organizational innovation, made possible by features of society and culture in which the great agrarian-bureaucratic empires ruling much of the rest of the world were deficient.

Consider an alternative view of the division of labor and of the path of its evolution. This view begins not in a distinctive understanding of production but in an idea about the mind. We know how to repeat some of our activities, and we do not know how to repeat others. As soon as we learn how to repeat an activity we can express our insight in a formula and embody the formula in a machine. Our machines can do for us whatever we know how to repeat. They can free our time, energy, and attention for what we have not yet learned how to repeat. In this way we make time count by devoting it, as much as we can, to what does not yet lend itself to formula and repetition.

The not yet repeatable part of our activities—the part for which we lack formulas and therefore also machines—is the realm of innovation, the front line of production. In this realm, production and discovery become much the same thing. We there seek to organize our productive activities so that they become a visible, collective image and instrument of our experimental thinking: our relations to one another in this forward edge of production resemble the problem-solving work of an individual human intellect.

To understand a state of affairs, we must imagine it changed: we must form a view of what it could turn into under certain conditions and by certain interventions. The possible is the adjacent: it is what can come next, as the result of some accessible transformation of a reality that is at hand. We can turn some of these possibilities into things, we can embody experimental conjecture in material production. Production then becomes more than a consequence of experimental thinking, it becomes its embodiment.

The pin-factory model of production describes the organization of work as if labor were a machine, meant to do the things for which we use machines, whatever we have learned how to repeat formulaically. We may have reason to organize work in such a way, but only if labor is abundant and cheap enough, capital is dear enough, machines are scarce and primitive enough, and our time is of little enough value—of so little value that we think we can afford to repeat ourselves. That may indeed be the past of the division of labor. It cannot be its future.

As we begin to free ourselves from the multiple, combined constraints that make the pin-factory model of the organization of labor feasible, we move into another way of understanding and organizing the division of labor: the view of production as collective learning and permanent innovation. Its generative principle is a revolution in our beliefs about the relation of time to the division of labor. The point is no longer to save time by repeating ourselves; it is to save time by avoiding repetition. Standardization—of products and services as well as of productive processes and organizational practices—is the most visible face of repetition.
A regime of international trade may discourage the move beyond the pin-factory model by, for example, the way in which, under the label of “intellectual property,” it turns innovations, including innovative processes and methods, into pieces of property. It may do so by inhibiting the worldwide movement of people across national frontiers to such an extent that it helps perpetuate vast disparities in the relative scarcities and price of labor and of capital, pushing some countries to specialize in pin factories while requiring others to do away with all their pin factories. And it may do so simply, and most deeply, by incorporating a particular version of the market economy into the rules establishing universal free trade. Such an incorporation chills the institutional experiments and the untried combinations of private enterprise and governmental initiative that the move from one type of the division of labor to another may require.

This standard of judgment would lose much of its pertinence if it lacked a foothold in a change that the world economy has already undergone. According to a familiar account of the global division of labor, more advanced capital-intensive, and technologically refined production takes place in the core, rich economies. More rudimentary, labor-intensive, and technologically primitive production goes on in the peripheral, developing economies. The hierarchical distribution of production on a worldwide basis is, in this view, the heart and soul of the international division of labor.

Now, however, we find more advanced production established not only in the rich North Atlantic economies but also in the top tier of the developing economies, as much in China, India, and Russia as in the United States, Germany, and Japan. What has flourished in particular sectors is not simply or primarily high-technology, knowledge-intensive industrial production; it is the advanced way of understanding and organizing the division of labor that I earlier contrasted to Smith’s pin factory and Ford’s assembly line.

These advanced sectors, established all over the world, are in communion with one another. They exchange ideas, practices, and people as well as technologies and services. Their network has, in some measure, already become the commanding force in
the world economy. They are responsible for the creation of a
growing part of national wealth in many countries, rich or poor.

Nevertheless, these productive vanguards remain only weakly
linked to the other parts of their national economies. The vast
majority of the labor force in the richer as well as in the poorer
countries has no chance of participating in them. The small vanguards
and the large rear guards, organized on the basis of con-
trasting understandings of the division of labor, have increasingly
become different and unconnected worlds. The abyss between
them has become the source of inequalities that are many-sided
in expression and powerful in effect. Such inequalities cannot be
adequately redressed by the two devices available in the world for
the moderation of economic inequalities: compensatory redis-
tribution by government through tax-and-transfer and the politi-
cally supported diffusion of small-scale property.

It is, therefore, not enough to ask of a world trading regime
whether it helps each national economy to move beyond the pin
factory and to enlarge the range of social and economic life open
to innovation-friendly cooperation. It is also important to ask
whether a system of trade helps engage the masses of ordinary
men and women in the movement from the pin factory to the fac-
tory of innovation so that they can stop wasting their time by re-
peating themselves as if they were machines.

A Central Conception: Mind against Context

Take these ideas for what they are: pieces of an understanding of
economic activity in general as well as of international trade in
particular. A view of the mind, and thus of our humanity, informs
this understanding.*

This conception of the mind and of humanity is not at the same
level as the other ideas discussed in this chapter. It penetrates and
envelops all of them. It is not so much their foundation as it is their
common element. It becomes a little better stated and better
grounded each time that one of them advances in refinement and
justification. In the context of this conception, each of the ideas
explored earlier in this chapter gains deeper meaning.

The mind has two aspects. In one aspect, it is modular and for-
malic. The mind is modular in the sense that it consists in separate
parts, defined by their distinct functions and embodied in different
regions of the brain. The expression of the parts of the mind in
parts of the brain is subject to the qualification of plasticity: within
certain wide limits, one part of the brain can take on the habitual
functions of another. The mind is formulaic (in this its modular
aspect) in the sense that these parts act repetitiously according to
formulas. It is in this aspect, and only in this aspect, that a mind em-
bodyed in a brain is like a set of formulas embodied in a machine.

In this modular and formulaic aspect, the mind is a zombie. It
acts under the compulsion of orders. It exhausts itself in repeated
moves. If, however, the mind were only a zombie, the characteris-
tic experiences of consciousness would remain both inexplicable
and impossible. Consciousness is totalizing: it envisages a field of
vision, action, and problem solving as a whole and interprets
particular incidents in relation to that whole. Consciousness is sur-
prising: it defies containment by any closed system of presup-
positions, methods, and canons that can be antecedently stated.
Consciousness is transformative: it grasps any particular state of
affairs by exploring its transformative variations—what it can turn
into under the pressure of certain interventions.

A conscious mind therefore has a second aspect in which it ex-
hibits these totalizing, surprising, and transformative qualities.
Here the mind has ceased to be zombie-like. It has become spirit,
if by spirit we mean the experience of not being contained or con-
tainable by any particular context of life or of thought or by any
enumerable list of such contexts. In this second aspect, the mind
enjoys the characteristic powers of recursive infinity, nonfor-
malic initiative, and negative capability. By its power of recursive
infinity, it uses finite elements (of language, of thought) to make
infinite combinations. By its power of nonformalic initiative, it
makes moves that it does not yet know how to repeat or to bring under a formula. By its power of negative capability, it gains in strength, and adds to insight, by doing more than the habitual, organized settings of its action and thought will countenance. It establishes new contexts for its thought and action.

The consummate expression of this power is the establishment of settings for thought and action that invite this limit-breaking activity and turn it into a device for the ongoing revision of the setting. The result is to attenuate the contrast between being inside a context and being outside it, and to make change less dependent on crisis and the past less able to rule the future.

The relative importance of the two aspects of the mind is not a natural fact that can be measured apart from the historical moment and the social situation. Suppose that society and culture are organized to present themselves as natural facts, entrenched against challenge and change. The distance between the ordinary moves we make within the settled contexts and the extraordinary, crisis-dependent moves by which we change them will widen. The second side of the mind—with its totalizing, surprising, and transformative qualities—will have fewer occasions to express itself. It will remain in the shadows or on the margin. It will depend on exceptional talent and extraordinary occasion.

Now suppose that society and culture are arranged to denaturalize themselves by making themselves more open to criticism and revision. The gap between the routine moves we make within the established settings and the exceptional moves by which we remake them will narrow. The second side of the mind will have more opportunity to manifest itself. It will never occupy the whole of mental life. Nevertheless, it will hold an important position. The relation between the two aspects of the mind will become a matter of paramount importance. It will even emerge as a theme in high culture.

Thus, the relation between the two aspects of the mind is never conclusively determined by nature; it is ultimately determined by politics; by the arrangements of society and culture and, most especially, by the extent to which these arrangements either inhibit or encourage their own revision.

The two-sidedness of the mind expresses and helps constitute a fundamental and pervasive attribute of our humanity, our transcendence over context. To say that we are embodied and situated spirit is to recognize that we are never exhausted by the limited orderings of society and culture, of organization and belief, that we establish and inhabit. They, relative to us, are finite. We, relative to them, are infinite. There is always more in us than there can ever be in them.

We can do more than rebel against the context and reach for the insight, the invention, or the experience that it fails to accommodate. We can create contexts that allow more fully for their own revision than the contexts now established: for example, ways of organizing a market economy or a trading regime that enable us to experiment, sequentially or simultaneously, with alternative regimes of contract and property. As a result, we can loosen the dependence of change on ruin and split the difference between being inside the context and being outside it. We can engage in a particular world without surrendering to it our powers of resistance and reconstruction.

This view of the two aspects of the mind, and the larger conception of humanity with which it is connected, suggest a general approach to the understanding of economic activities and of the division of labor. A few connected and overlapping themes, central to the argument of this book, define this approach.

A first theme is the notion of a contrast between the activities or the forms of labor that we have learned how to repeat and those that we have not. We can describe the repeatable activities in formulas and then embody the formulas in machines. We can use the repetitions, the formulas, and the machines to devote increasing parts of our time and energy to the activities we do not yet know how to repeat. The dialectic between the repeatable and the not yet repeatable is central to our material progress, including the rise of productivity: labor productivity in the first instance, and total factor productivity through the chain of causal connections to which the rise of labor productivity belongs. And it is anchored in the relation between the two sides of the mind.
A second theme is the contrast between two directions in which to arrange the division of labor at work. One direction reduces most of work to the zombie-like activities of the first aspect of the mind, and reserves the totalizing, surprising, and transforming attributes of the second side of the mind to the supervisor or power-holder on top. In this direction lies Adam Smith's pin factory and Henry Ford's assembly line: stark contrasts between supervisory and implementing jobs as well as among the tasks of implementation.

The other direction, the factory of innovation, gives much greater place to the second aspect of the mind in the organization of the mind. It treats the implementation of tasks as an opportunity for their revision, and softens the contrasts between conception and execution as well as among jobs of implementation. It uses our ability to repeat, expressed in formulas that are embodied in machines, to shift more of our time and effort toward the frontier of those activities that we do not yet know how to repeat. In this way, it turns the workplace more nearly into a practical expression of the imagination. (Imagination is only another name for the second aspect of the mind.) In so doing, it also provides in microcosm a model for the remaking of all society.

A third theme is the decisive importance to economic growth of a family of cooperative practices that I have called innovation-friendly cooperation. All forms of material progress, including economic growth, depend on cooperation. A market economy itself, I later argue, is a form of simplified cooperation among strangers that depends on a modicum of trust; such an economy is impossible when there is no trust among the strangers and unnecessary when there is high trust.

However, innovation is almost as important as cooperation. Innovation depends on cooperation: it is impossible to innovate, organizationally or technologically, without securing cooperation. The imperatives of innovation and cooperation nevertheless regularly conflict because every innovation threatens to disturb the vested rights and settled expectations in which any cooperative regime is entangled. A new technology, for example, is likely to be perceived as strengthening the hand of an established or emergent segment of the labor force while threatening the jobs of another segment.

A benefit of great value results when we succeed in designing regimes of cooperation that moderate the tension between cooperation and innovation. The form of the technical division of labor that I called the factory of innovation is itself an expression of such an advance. So, more generally, is any form of cooperation, such as commando warfare, in which the definition of what to do is revised in the course of doing it: all responsible for executing have some share in redefining, and the participants refuse to allow preexisting hierarchies of advantage or allocations of role to restrict how they can work together.

The family of innovation-friendly practices of cooperation depends on conditions that also help shape its character and meaning. Basic educational and economic endowments, with their enabling effect on the individual, must be as universal as possible; they must not depend on holding any particular job. The society, although unbound by any rigid commitment to equality of circumstance, must be relentless in pursuit of equality of opportunity. It must prefer practices and arrangements that destabilize entrenched divisions of role and hierarchies of advantage, whether or not the advantages at issue result from the hereditary transmission of property or of access to high-quality education. The culture must be penetrated by an experimentalist impulse. This impulse must find sustenance in a practice of teaching and learning that is problematic and analytic rather than informational in its method, selective rather than encyclopedic in its scope, cooperative rather than individualist or authoritarian in its social form, and dialectical rather than canonical in its orientation.

Such conditions depend for their fulfillment on the public and private cultivation of the powers associated with the second side of the mind. They in turn help establish a setting in which this aspect of our mental life can become central to our individual and social experience rather than remaining in the shadows.

A fourth theme is the need for a way of thinking about markets and market economies that judges any particular form of market organization by the opportunity it offers for its own ongoing,
piecemeal reconstruction, as well as for the free combination of factors of production and the free exchange of what is produced. When we witness increasing freedom to exchange and trade and increasing freedom to combine factors of production, we may be tempted to say that the principal idea of a market economy has been realized. These twin freedoms, however, may be realized in an institutional context—a way of organizing market-oriented exchange and production—that remains largely immunized against challenge and change.

Once we become aware of this hidden constraint, we find ourselves forced to direct our thoughts to a second, unfamiliar level of concern. We need to consider the range of freedom to renovate the institutional framework of market activity as well as to transact within that framework. Our assessment of whether the market principle has been radicalized will now depend on two sets of considerations rather than on one. If advance in freedom at one level—freedom to transact and to combine factors of production—is bought at the cost of failure to advance at the second level—freedom to vary and to revise the transactional setting—we must judge ourselves unsuccessful.

We do not arrive at this way of thinking about markets until we defy a prior premise of much conventional economic thinking: the notion, rarely acknowledged in theory but habitually honored in the practice of analysis and argument, that the market has a single natural and necessary institutional expression. Defiance of this notion may seem sterile. It provides support, however, to the way of thinking about markets I have just described. It becomes fertile through its marriage with the imagination of alternative institutional forms of a market economy.

The two-level thinking about markets that results is incompatible with much in our received assumptions about free trade. It will not be enough for an international trading regime to lower barriers to trade if, in so doing, it hinders experiment and diversity in the way each of the trading partners arranges production and exchange and organizes its own market economy.

The more we approach trade in particular and market-oriented activity in general with an eye to these two levels of concern rather than just to one, the greater the likelihood that our proposals will make the world safer for the second side of the mind. The best framework—including the best framework for global trade—will be the one that is least a prison, even if this prison has graven over its entrance the word freedom. It will therefore also be the one that offers the most propitious home for our powers of recursive infinity, nonformulaic initiative, and negative capability.

A fifth theme is that, in the development of economies, the creation of difference is as important as the selection, from the diverse stuff, of the most efficient solutions. As in biological evolution, the results of natural selection depend on the range of variation in the material subject to selection, so in economic history competitive selection depends for its effect on the range and variety of the material to which it applies.

What differences? To specify all the relevant forms of difference, we can begin backward from the output of economic activity, through the processes, practices, machines, and organizations that produce it, until we reach the institutional setting of production and exchange: diversification of goods and services; of ways to join people, ideas, and machines in production and trade; and, finally, of the basic institutional arrangements for market activity, including the regimes of property and contract.

A way of thinking about economic activity that treats the diversification of the material subject to competitive selection as equal in importance to the competitive selection of the most efficient outcomes will differ in orientation and result from one that focuses solely on the latter and takes the former for granted.

The translation of the idea into the practical agenda of development economics helps reveal its intuitive core. Governmental initiative and collective action may be needed to counteract the inhibitions of relative backwardness: for example, the difficulty of using the skills development in one line of production to carry forward another. Not only may the net of productive activities be too thin, the activities by their very backwardness may refuse readily to yield a set of generic, context-transcending capabilities that can be extended to other, neighboring lines of production. For this and other reasons, it may be vital to make up for the
missing conditions and deliberately to arouse a fever of creative entrepreneurial activity.

It then becomes all the more important to impose a rigorous selection, through domestic and foreign competition (subject to the qualifications I later explore), of the products of this activity. However, the arousal is as important as the selection; the two must advance together, through a series of successive efforts at overcoming particular constraints on both the supply and the demand sides of the economy. It is just such a coexistence between arousal and selection that this conception generalizes to the economy as a whole. This generalization enables us to treat diversity and efficiency as concerns of equivalent weight in economic thinking.

Like the fourth theme, to which it bears a close relation, the fifth one is connected to the image of the two-sided mind through a view about our relation to the institutional and conceptual contexts of our activity: the same view I invoked when first presenting that image. The deep source of the importance of difference lies in our transcendence over all the particular contexts of our activity. There is always more in us, individually and collectively, than there can ever be in them. From this fact arises our inability ever to find an absolute frame of reference in thought or in social life, one that can accommodate the full scope of our powers and the full range of the experiences that we may have reason to value.

The next best thing to an absolute frame of reference is a frame that facilitates its own remaking and that allows us to engage, on the terms it specifies, without surrendering our powers of criticism, resistance, and revision. To engage without surrendering, and thus to be in the world without being entirely of it, is a fundamental species of freedom and power. The fourth theme, with its emphasis on freedom to change the transactional framework as well as freedom to transact, is directly related to this view.

The fifth theme—the theme of the central importance of the creation of difference in economic life—is connected with a further implication of the same view. Because there is no definitive context for our humanity, including no context that can do justice to our powers of invention and production, we can become big-