



Kuchař, P. (2016). Entrepreneurship and institutional change: The case of surrogate motherhood. *Journal of Evolutionary Economics*, 26(2), 349-379. <https://doi.org/10.1007/s00191-015-0433-5>

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Entrepreneurship and Institutional Change: The Case of Surrogate Motherhood*

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Forthcoming in the Journal of Evolutionary Economics

Abstract

Entrepreneurs do more than just buy low and sell high; they sometimes also change our institutions, including our categories of thought. New institutional economics has been examining incentives that drive individuals to bring about market-supporting institutional arrangements. There is, however, an aspect of entrepreneurship conducive to institutional changes that has been neglected by contemporary institutionalist theories and that remains underdeveloped in entrepreneurship research. When and how does entrepreneurship bring about institutional change? I suggest that entrepreneurs are agents of institutional change when cultural categorization is ambiguous with regard to the proper and permissible applications of novel artifacts. Motherhood, for example, used to be a simple category, but surrogacy changed that radically. Examining newspaper evidence, social surveys, statutory law, and judicial cases, I show how entrepreneurs, by provoking a change in interpretation and judgment, challenged the existing institutional legal ordering of procreation turning a technically feasible method of surrogacy into current practice.

Keywords: Institutional change, Entrepreneurship, Surrogate Motherhood, Persuasion, Political Processes

JEL Classifications: B52, D02, D72, F16, K40, L26, P26

*I am grateful to Niclas Berggren, Enrico Colombatto, Giuseppe Eusepi, Aristides Hatzis, Dan Klein, Hugh McLachlan and Richard Wagner for helpful suggestions. I also wish to thank Jan Winiecki, Paul Fudulu and other participants at the 2014 Prague Conference on Political Economy for their ideas and appreciate the comments of discussants at the 2014 Southern Economic Association conference in Atlanta, GA. This work benefits from the thoughts and insights of two reviewers, whose generous feedback has been of great value in clarifying and sharpening some of the ideas presented here. All remaining errors are my own.

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1 Introduction

In September 1984, the following advertisement appeared in a Kansas newspaper: “Surrogate Mothers needed for Infertile Couples. Artificial insemination, must be healthy, over 21, and have given birth to healthy child(ren). Medical and living expenses (\$800 per month) paid for 10 months. Hagar Institute, Topeka, Kansas.”¹ Today, in some US jurisdictions such an advertisement would be illegal. In 1984, surrogate motherhood was unregulated and there was no formal enforcement of the surrogacy contracts; by 1995 twenty states had adopted statutes regulating various aspects of surrogate motherhood. Over the period of a decade, a formal surrogacy market emerged and in many jurisdictions contractual surrogacy is legal and enforceable. How did the market for surrogate motherhood services come about?

The market system is a powerful institutional mechanism conducive to the development of human societies. Through markets, people allocate, discover and create resources. Letting the market institutions emerge is thus a source of development and growth. As Nicholas Dew (2008: 240) noted, “[w]e know a lot, mainly from economics, about how markets work once they exist,” the problem is that “we know a lot less about how markets come to be.” Kenneth Arrow (1974: 8) remarked that “[a]lthough we are not usually explicit about it, we really postulate that when a market could be created, it will be.” Mark Casson (1982: 79) went so far as to say that there is an “assumption that setting up a trade is a costless activity,” which might have led to the fact that “the recent literature in entrepreneurship has largely ignored market-making” (Godley and Casson 2014: 4).

New institutional economics has been examining incentives that drive individuals to bring about new institutional arrangements, suggesting that setting up markets is not a costless activity (Coase 1937; Anderson and Hill 1975, 1990; Libecap 1978, 1994). In this respect, new institutionalism has been invaluable. The emerging discipline of entrepreneurship examines specific aspects of the entrepreneurial function, including the discovery, evaluation and exploitation of entrepreneurial opportunities (Eckhardt and Shane 2003; Shane 2003), opportunity creation (Alvarez and Barney 2007; Görling and Rehn 2008), entrepreneurial judgment (Foss et al. 2008; Klein 2008) and effectuation (Sarasvathy 2003, 2008; Dew et al. 2011). However, there is a category of entrepreneurship that has to do with institutional changes and market-making that has largely been neglected by contemporary institutionalist theories and remains underdeveloped in entrepreneurship research (Pacheco et al. 2010).

Entrepreneurs, in order to succeed, must break away from the common way of doing things and translate new concepts into reality; I suggest that often, and perhaps even more importantly, they must also convince others that the novel use and application of these concepts and artifacts is both proper

¹This advertisement appeared in Junction City (Kansas) Daily Union on Sep. 10, 1984.

and permissible. Successful entrepreneurs rally consensus, which may lead, by means of political processes, to changes in the rules of the game; they help dismantle cognitive, legal and political obstacles, letting the market-supporting institutions emerge. My claim that entrepreneurs are agents of institutional change is especially relevant when the permissibility of the possible applications of new technologies is uncertain.

To illustrate my thesis, I present the case of surrogate motherhood. By the end of the 1970s and in the early 1980s, a handful of entrepreneurs had begun bringing together childless couples with women willing to become surrogate mothers. In order to turn surrogacy into a useful innovation, however, they had to ensure that the new practice would become tolerated and legally recognized. Making the innovation of surrogacy proper and permissible turned out to be a question of shaping the interpretation and the public opinion of surrogacy. By challenging the very definition of motherhood, entrepreneurs contributed to the growing public approval of surrogate motherhood and provoked the reinterpretation of the then current rules, which had been designed without surrogacy in mind but were nevertheless potentially applicable.

2 Theoretical considerations

2.1 Question: When and how does entrepreneurship bring about institutional change?

Entrepreneurs are considered to be agents of change in economic theory. All entrepreneurial activity seeks the attainment of a projected future state through present actions. Entrepreneurs imagine specific projects and carry them out through the passage of time. Any act of entrepreneurship is a conjecture that compares the expected difficulties with the expected gains related to bringing about the imagined artifact. The difficulties that the entrepreneur expects involve the estimated cost of translating his vision into reality; the success of the conjecture depends on uncertain valuations by potential customers. Although the entrepreneur needs to gather and to invest resources today, the entrepreneurial gains and profits depend on these uncertain future valuations.

Entrepreneurial activities are embedded within the existing structures of beliefs and institutions. These structures to a large degree determine whether entrepreneurs will use their creative talents for productive, unproductive or destructive purposes (Baumol 1990). Institutions constrain but also enable the actions and interactions of economic agents, and although entrepreneurs are bound by existing habits of thought, they often directly or indirectly act upon habitual routines and set in motion processes that help dismantle the existing status quo.²

²Different categories of entrepreneurship have been proposed. For example, Arjo Klamer (2011) and Joel Mokyr (2013) refer to cultural entrepreneurs, Julie Batillana et al. (2009) and David Li et al. (2006) analyze institutional entrepreneurs, and Douglass North (1990; 2005) speaks about organizational entrepreneurs (political, social or economic). Peter Boettke

There are different theories about how institutional rules emerge and change.³ Viktor Vanberg (2014: 4) suggests that the change in institutional rules forms part of “cultural evolution,” which is “a trans-generational growth-of-knowledge process, a process in which acquired (as opposed to genetically inherited) problem-solving capacity is accumulated over time, resulting in a stock of knowledge that embodies the experience gained by the trial-and-error experimentation of past generations, incorporated in tools, rules, belief-systems, and all kinds of cultural achievements.” A theory of institutional change might thus be seen as a theory of learning. Any theory of learning will need to explain who the agents of change are in the use of knowledge in society and how these agents contribute to changes in the rules and belief systems.

I propose a scheme in which the knowledge K_i^t of time t and place i is defined as a set of beliefs B_i^t , institutional rules I_i^t , and outcomes O_i^t of the actions and interactions of individuals at the level of organizational governance and resource allocation.⁴ The change of knowledge is represented by the mapping of $K_i^t(B_i^t, I_i^t, O_i^t) \rightarrow K_i^{t+1}(B_i^{t+1}, I_i^{t+1}, O_i^{t+1})$, that is, by a transformation of the knowledge of time t into some future knowledge $t + 1$; we may call this transformation learning. In the following sections, I develop the scheme to examine the relationship between different kinds of knowledge and the role of entrepreneurship in learning.

In this scheme, institutions are considered to be coercively enforced rules.⁵ This definition makes a distinction between institutional rules, on the one hand, and beliefs on the other, in a way that is not unlike the “institutions-as-constraints” conceptualization of Douglass North (1990: 3).⁶ Coercively enforced rules are conceptually distinct from but not independent of shared beliefs. As such, shared beliefs coincide with what North calls informal rules.⁷ Institutional rules depend on shared beliefs

and Chris Coyne (2007) provide an excellent summary of the different aspects of institutional, social and political categories of entrepreneurship. I do not make any analytical distinction between these conceptual categories because entrepreneurship throughout these categories is always driven by the imagination of future projects and the pursuit of untapped gains.

³Acemoglu et al. (2005) outline four complementary views of institutional change: Institutions might change following efficiency considerations, because of ideological differences, incidentally (as a result of human action but not human design), or as a result of choices of politically powerful groups.

⁴In this scheme $t = (1, 2, \dots)$ and $i = (1, 2, \dots)$.

⁵See, for example, Greif and Tadelis (2010: 229).

⁶For a summary of the current thought on institutions see, for example, Acemoglu and Robinson (2012) or Hodgson and Calatrava (2006).

⁷According to Masahiko Aoki (2011), shared expectations “are salient ways of the societal games played, being played, and believed to be played in a population.” Aoki calls these beliefs deep institutional structures. The patterns of these shared beliefs are “summarily and publicly represented by laws, norms, organizations, social rules, and other external artifacts, which may be referred to as substantive forms of institutions.” It should be made clear that the definition of institutional rules I use corresponds to Aoki’s substantive forms of institutions insofar as the laws, norms and organizations are backed by coercive force.

through the concept of legitimacy. Rules are illegitimate if they do not correspond with, or they go against, shared beliefs.⁸

To account for the role of entrepreneurship in bringing about changes in institutional aspects of knowledge, I focus on the category of entrepreneurship, which involves the use, rearrangement and investment of productive resources in undertaking activities that will, according to the entrepreneur, bring about a useful artifact – an innovation. To be sure, the entrepreneur “must not necessarily be the inventor of an idea, but he puts it into practice” (Schumpeter 1912: 543, quoted in Meerhaeghe 2003). A new concept is rarely “pushed through ‘on its own’”; in order to win serious consideration, the new idea or prototype needs to be “picked up by a forceful personality” (Schumpeter [1912] 2002: 139). In this sense, entrepreneurs bring about useful innovations by exploiting and pushing through new concepts or untried technological possibilities. In the next section, I show that to push new concepts through, entrepreneurs will often need to engage in various kinds of persuasion.

2.2 Argument: When the rules of the game are ambiguous, entrepreneurs engage in persuasion to bring about institutional change

Entrepreneurs trying to attain a temporary competitive advantage through innovation must exploit new concepts or untried technological possibilities and turn them into useful artifacts. To produce a useful innovation, however, translating new ideas, discoveries and concepts into reality is often not enough. Time and again, entrepreneurs must also make sure that the novel use and application of these artifacts is socially and legally tolerated. I suggest that when markets are not established and cultural categories of thought are not well defined, entrepreneurs must convince others that carrying out the novel artifact is proper and permissible. By means of persuasion, entrepreneurs help dismantle cognitive, legal and political obstacles that prevent market-supporting institutions from emerging.

According to Claude Ménard (1995: 170), “a market is a specific institutional arrangement consisting of rules and conventions that make possible a large number of voluntary transfers of property rights on a regular basis.” For the functioning of markets, the simple institutional rules of ownership and exchange – property and contract law – are essential (Epstein 1995: 78). In any market that is considered to be a well-functioning form of human interaction, some form of property and contract law can be identified; these rules of ownership and exchange do not need to be formal. The system of market interactions may function differently if the rules are defined and enforced informally, but the possibility of market interactions is not necessarily dependent on a formal legal institutional framework. Simulating decentralized market processes, Peter Howitt and Robert Clower (2000: 81) show that “market organization, with commodity ‘money’, is a possible emergent property of interactions

⁸For a discussion of the concept of legitimacy, see Levi, Sacks and Tyler (2009) and also Fuller (1969), according to whom the authority of legal rules ultimately rests on people’s moral attitudes.

between gain-seeking transactors that are unaware of any system-wide consequences of their own actions.” I believe this analysis can be expanded looking into what happens at the margin, and explaining how new artifacts turn into commodities compatible with the organized monetary exchange through the expansion of institutional structures of market organization.

It should not be assumed that changes in market-supporting institutional rules will be purely functional: “Consider something that evolves,” writes Ulrich Witt (2008: 551), “the technology and institutions of an economy, or the set of ideas produced by the human mind. Although such entities can change over time in response to exogenous, unexplained forces (“shocks”), their genuinely evolutionary feature is that they are capable of transforming themselves endogenously over time.” Proponents of generalized Darwinism suggest that “institutions are perpetuated not simply through the convenient coordination rules that they offer. They are also perpetuated because they confine and mould individual aspirations, and create a foundation for their existence upon the many individual minds that they taint with their conventions” (Hodgson 2007: 13).⁹ Conventions and habits, by virtue of shaping individual aspirations, are essential in creating or developing an institutional structure of legal rules or, in Hodgson’s terms, an organization: “Any attempt to create or develop an organization, or to change its strategy, partly but necessarily involves the development of accordant individual habits” (Hodgson 2007: 15).

Conventions and habits of thought help us interpret and understand our environment; they are heuristics, they provide rules: how to think and what to do. This conventional understanding is shaped by how we talk about things. Deirdre McCloskey and Arjo Klamer (1995) estimate that “sweet talk,” in other words, persuasion in the marketplace, makes up for over 25 percent of GDP.¹⁰ McCloskey and Klamer mention that people such as portfolio managers and stockbrokers talk non-stop in order to persuade other people, such as venture capitalists, bank managers, owners of places of work, city officials, and potential customers, to make a deal. Some of these deals happen within markets, some of them do not. By way of persuasion, entrepreneurs need to shape the understanding of different kinds of people to succeed in carrying out their enterprises. Innovating entrepreneurs, for example, strive to have their innovations embraced by large numbers. In order to do so, they engage in a kind persuasion that we commonly call marketing.

But to have a project embraced by large numbers, to be able to persuade investors, lenders, to find supplies of labor and to attract potential customers, the entrepreneur must also often make sure the project is tolerated by bureaucrats, city officials and other political entities, who enforce the rules

⁹A prominent example of generalized Darwinism has been developed by Hodgson and Knudsen (2010, 2012). Different variants of such a generalization can be found in Pelikán (2011, 2012) and Witt (2002).

¹⁰Furthermore, McCloskey (2010: 37) argues that “a rhetorical change around 1700 concerning markets and innovations and bourgeoisie” is the crucial explanation for the Industrial Revolution: “[I]n the eighteenth century the ideal and the material crossed wires, and powered the modern world” (p. 42).

of the game. To ensure that carrying out novel combinations is permissible, entrepreneurs will often need to engage in lobbying, which is a kind of persuasion conceptually distinct from marketing. To be sure, legal tolerance is not a sufficient condition for entrepreneurial success. But convincing political entities and legitimizing new combinations through molding the habits of thought and shared beliefs of citizens and other spectators will often be necessary.

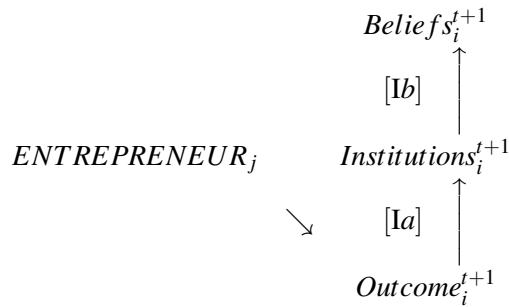
The entrepreneur is “above all a persuader” (McCloskey and Klamer 1995: 194). In the following sections I show that, while the often analytically invisible sweet talk within markets is extremely important, much equally important persuasion happens outside markets. Legitimation to make the new combinations proper and permissible, or lobbying to secure legal tolerance for novel artifacts are examples of extra-market persuasion that take place before markets emerge, contract or expand. In some cases, the entrepreneurial persuasion will lead, through political processes, to changes in the rules of the game.

2.2.1 Entrepreneurship and resource allocation: Persuasion by way of marketing

When we define entrepreneurs as middlemen, we talk about individuals or firms that buy cheap and sell dear, about entities that notice the twenty dollar bills lying on the ground and pick them up, pushing the market system toward equilibrium (Kirzner 1973). Entrepreneurs such as financial-market or commodity arbitrageurs act in a world in which goods are well defined and the institutional environment is given. When the entrepreneur has a firm belief that the preferences and beliefs of other market participants are not going to change dramatically and his understanding of the situation tells him he can buy cheap and sell dear and make a profit, he will gather resources and invest in whatever it takes to correct the errors of other market participants who have not yet arbitrated away the price differences.

The use, rearrangement and investment of productive resources can become manifested as arbitrage, on the one hand, or as innovation on the other. This depends on the nature of the situation in which the entrepreneur finds himself. Unlike the middleman, an innovating entrepreneur comes up with new combinations. Introducing new products, production methods, markets, sources of supply, or industrial combinations, the innovating entrepreneur is a disturbing force that breaks away from the market equilibrium (Schumpeter 1934).

From a certain perspective, innovating entrepreneurs are quite different from entrepreneurial middlemen. Middlemen push the economy toward the production possibility frontier, whereas innovators push the very frontier. From another perspective, however, these entrepreneurs are quite similar: Both kinds of entrepreneurs act within a market, that is, within a well-defined institutional environment in which, by way of marketing, they have to convince their potential customers to make the deal.



Both the middleman and the innovator act in the realm of resource allocation (shaping the outcome O_i^{t+1}); they both tend to “abide” by the existing institutional rules (Henrekson and Sanandaji 2011).¹¹ Abiding entrepreneurs do not usually act with the direct aim of changing the rules of the game. This does not mean their actions do not influence the prevailing institutions I_i^t and beliefs B_i^t that constrain and enable their actions. But the influence, exerted through feedback effects *Ia* and *Ib*, is mostly unintended. Innovating entrepreneurs may, by virtue of introducing new combinations, unintentionally help transform existing institutional arrangements or alter existing conventions. On the other hand, abiding entrepreneurship will often reinforce the existing structure of institutional rules and beliefs that made the very entrepreneurial action possible.

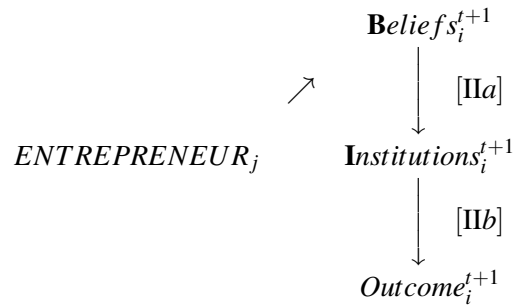
2.2.2 Entrepreneurship and beliefs: Persuasion by way of legitimation

Entrepreneurs acting within a given institutional framework typically come up with cheaper ways of doing things or present entirely new solutions to problems consumers were not even aware of. But what happens when markets supporting institutions are not established and when cultural categorization is ambiguous with regard to what are the proper and permissible uses of the new combinations. Can the novel artifact legitimately be appropriated and transferred? Does the new innovation qualify as a marketable good?

When it is not clear if the novel artifact is compatible with the market process, the entrepreneur must make an effort to bring others around to an agreement on the proper and permissible use of the new artifact. I suggest this is a category of entrepreneurship that has been neglected in the literature. The entrepreneur can succeed only if he manages to make other people carry out the new combinations he fashioned. In doing so, the entrepreneur contributes to employing current social

¹¹In the scheme, the entrepreneur j may be both an arbitrageur or an innovator. Since $j \in \{1, 2, \dots\}$, there will be different entrepreneurs who act and interact with each other while engaging in different kinds of persuasion.

categories to classify the new artifact, or to establishing new social categories through employing the new combinations of resources and processes.¹²



There are two essential conditions defining innovation. First, the entrepreneur comes up with new combinations of existing means which he translates into reality. Second, the entrepreneur makes other people participate in carrying out these new combinations. The first condition is rather intuitive: translating new ideas into reality requires the investment of resources – anything that needs to be done from the moment a new idea has been conceived until the time the new innovation reaches the consumer. The second condition, however, is essential for the purpose of my argument: the entrepreneur must win others to his side, must persuade them to abandon the usual way of doing things, and must make them adapt to the application of the new combinations.¹³ This is the institutional aspect of entrepreneurial effort. The entrepreneur may succeed in translating a new concept into reality, but the innovation is useless unless its use and application is socially and legally tolerated. In such a case, the entrepreneur must convince others that carrying out the new combinations is a desirable activity. In doing so (through the constraining and enabling effect *IIa* of shared beliefs on institutional rules), he helps to set boundaries within which formal institutional rules can legitimately emerge.

¹²Koppl et al. (2014: 24) mention a generally related problem: “I cannot sell you an apple for a dollar unless our ideas of ‘apple’, ‘dollar’, and ‘trade’ are more or less the same.” Earl and Potts (2004) call this a “framing problem.” It is my contention that an important part of the framing problem is legitimacy: A crucial task of entrepreneurial persuasion will often be to convince others that carrying out monetary exchanges in diverse artifacts is proper and permissible. If persuasion fails, brokerage to circumvent exchange taboos may take place to intermediate the otherwise disreputable exchanges (Rossman 2014).

¹³For a discussion of the second condition, see Swedberg (2002). Schumpeter had originally recognized that coming up with new combinations of existing resources is not the difficult part of entrepreneurial effort. Rather, as Swedberg points out, “the [original Schumpeterian] entrepreneur ... realizes that it is absolutely imperative to get the support of other people ... [who] will not by themselves turn into persons who are capable of carrying out new and creative tasks. Most people just want to do things the same way that they have always done them, ... what the entrepreneur has to do in this situation is to buy them over to his side” (pp. 234-235). This emphasis on the social element of entrepreneurship disappeared from the widely quoted 1934 edition of Schumpeter’s *Theory of Economic Development*.

This category of entrepreneurship, which is to a large extent cognitive, is different from arbitrage, contracting for property rights or introducing new products to existing markets. This type of entrepreneurship establishes cultural categories of marketable goods and the very markets in which these goods are exchanged.

Although there is a conceptual distinction between the cognitive and institutional aspects of entrepreneurship that bring about changes in the rules of the game and the market aspect of entrepreneurship that initiates new combinations and introduces them into the economy, these conceptually separate entrepreneurial functions may be – and often are – carried out by the same entrepreneur *j*. It will often be the case that, besides carrying out the new combinations and introducing them into the markets, the innovating entrepreneur will also have to convince others to take part in carrying out these combinations, effectively shaping their habits of thought.

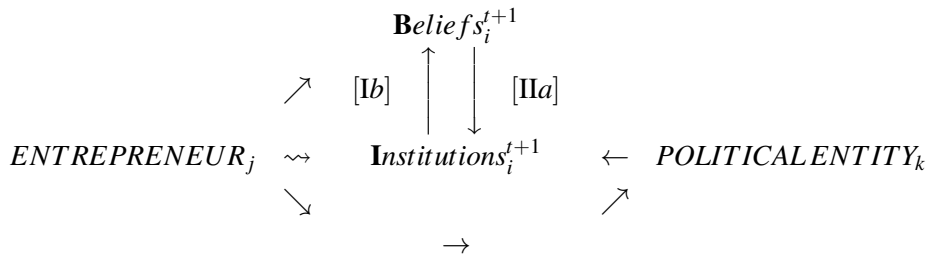
2.2.3 Entrepreneurship and institutions: Persuasion by way of lobbying

Is there a reason to believe that a person who is good at introducing new combinations into the economy is also good at getting laws changed? Legal institutions are coercively enforced rules, and the power to introduce, change and enforce the formal rules of the game is thus restricted to governmental political entities. From the analytical perspective, there is no distinction between political and non-political aspects of entrepreneurship: Agents in both categories share the “will to conquer” (Schumpeter 1934: 93). But there is a conceptual distinction: Non-political entrepreneurs do not have the institutional power to change the formal rules of the game, whereas political entities such as legislators, bureaucrats or judges do.

Political activity forms part of all activities that constitute the system of division of labor in a society. Through specialization, people pursue their comparative advantages to secure gains. On the one hand, entrepreneurs in the non-political realms must either come up with cheaper ways of doing things, buy low and sell high, introduce a new combination, or sometimes explicitly convince their customers and others that the new way of carrying out of familiar concepts is desirable and proper. On the other hand, political entities must – before they can start producing new policies – first convince their constituent bodies to appoint them (Wohlgemuth 2002). It is here assumed that all people always aspire to better their own situation through securing gains in different systems of competition and cooperation. But these systems of competition and cooperation need not be restricted to markets and the gains need not be restricted to money. Competition can be political and gains, such as power and prestige, can be non-monetary. Consequently, political and non-political enterprises face different feedback mechanisms, which make a difference in terms of how the two separate categories of entrepreneurship are carried out. If the skills and competences for the marketing and legitimation of

new combinations are different from the competences for getting laws changed, these differences will be reflected in the division of entrepreneurial efforts among political and non-political enterprises.

Political entities often produce goods that are complementary to the inputs that private entrepreneurs employ in their own activities. These goods might range from the maintenance of highways, providing enforcement of particular contracts or maintaining a system of licenses. By and large, these goods and services are not sold directly. The problem is that political competition, unlike market competition, does not generate prices. But valuations must be established, and political entities must decide which enterprises to support and to what extent. The Hotelling-Downs theories of political decision making suggest that political entities strive to succeed through securing votes by means of satisfying voter preferences.¹⁴ If political entities aim to satisfy popular opinion, they will act in the interests of those entrepreneurs who have in specific instances made the most significant impact on the climate of opinion. In addition, besides influencing political entities through shaping the climate of opinion, there may often be deeper entanglements between entrepreneurs and political entities (Wagner 2010). Entrepreneurs often compete for the attention of political entities not just indirectly, by means of shaping popular beliefs, but also directly, through lobbying, contributions to political campaigns, charitable giving to politically favored causes, or outright bribery.



Different political systems are characterized by different institutional settings, which will generally determine the propriety and effectiveness of using variants of either of these two broad channels of entrepreneurial persuasion. In some cases, institutional changes will be achieved through legitimation (effect IIa); in other cases lobbying will also be necessary. In some cases, the relationship between private enterprises and public entities will be more direct; in other cases, the entanglement will be indirect.¹⁵

¹⁴See, for example, Downs (1957) and Persson and Tabellini (2000).

¹⁵The form of a political entity k will be determined by a particular institutional order that sets rules for the degree of separation of legislative, executive and judiciary powers. Since $k \in \{1, 2, \dots\}$, the particular political entity k may be, depending on the institutional setting, at the same time a legislator, a judge, and an executioner (such as in cases of small

2.2.4 Entrepreneurship and political processes of emergent opinion building

If public opinion plays some role in constraining policy outcomes, political entities exposed to institutionalized competition will often be expected to justify their decisions in front of the general public. In many cases, however, political entities are not led by any preconceived notion of public opinion, but are often required “to fashion and, within very wide limits, even to create the will of the people” (Schumpeter 1942: 263). Rather than conceiving of political entities as exogenous agents equipped with the knowledge of a consolidated set of individual political preferences, it might be useful to analyze them as agents of the emergent political process of opinion building. In this process, political entities interact with non-political actors on the same analytical plane. I make three qualifications to account for the knowledge-generating character of the political process:

1. The change in institutional rules can happen in the absence of public consensus; it can take place through interest group influence or political leadership that is independent of public opinion.
2. In the presence of public consensus, the change may fail to happen; the change of institutional rules does not happen automatically or continuously.
3. There are circularities in the process; legal institutional change is both a product and a cause of changes in shared beliefs.

First, political actors have bounded rationality: political entities often do not know precisely what public opinion is and citizens are often not sure what political decisions best serve their interests. In a world of bounded rationality, political entities thus sometimes turn into political leaders shaping, along with private entrepreneurs, the emerging consensus, which is “a generally accepted point of view, a public opinion that is characterized by a sufficiently large overlap of individuals’ images”; this consensus makes it possible for “the media and citizens [to] take a position, discuss the issue, and expect others to be familiar with the major positions of the contending camps” (Wohlgemuth 2005: 47).

In many important cases of novelty, a sufficiently large overlap of individuals’ images simply does not exist. In complex cases, political entities may need to introduce institutional rules in the absence of public consensus, or make the case for suggested political decisions and convince the constituent bodies of the desirability of new institutional rules. This means that it is often not enough for political entities to follow public opinion. To maintain the power and prestige that goes with the office, they will often need to propose solutions to complex issues that their constituents had “never

group governance). At the other end of the spectrum, there will be three independent political entities (as is common in modern constitutional democracies) carrying out the legislative, executive and judiciary tasks.

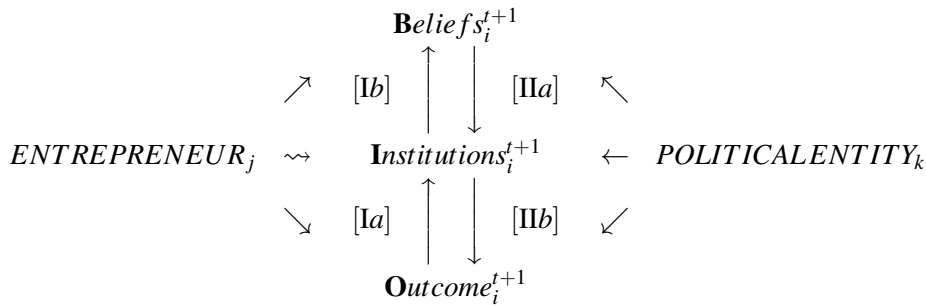
thought of before but which they want to keep as soon as they can see the benefits” (Wohlgemuth 2000: 285). In these cases, the political entity may turn into a political leader whose actions will indeed be entrepreneurial.

Second, even in the presence of public consensus, changes in the rules of the game do not follow automatically. Political entities are agents with their own principles of motion. Even if the median voter knew exactly what he wanted based on his calculations of party differentials, this would not imply that political entities can always manage to organize themselves to transform the public consensus into political outcomes. Political entities, following their own principles of motion, do not generally act as organizational units with members agreeing on all their goals (Wohlgemuth 2005). Unless the political process is characterized by low friction, an institutional lock-in may take place, leading to unfavorable outcomes in situations in which all parties to the political process would have been better off had the change taken place.

The likelihood of change in institutional rules generally depends on the specificity of these rules, on the impact of organizational or technological innovation (effect *Ia*), and on the significance of ideological changes (effect *IIa*). The more general the existing institutional rule, the less costly it is to accommodate disruptive bottom-up forces of organizational and technological innovations and ideological shifts within the existing institutional structure. As there may be a threshold that needs to be reached to press political entities to adjust the rules of the game to changes in market outcomes or shared beliefs, legal institutional rules will often not follow societal changes in a continuous fashion.

Consider, for example, judges as an example of political entities empowered to change the law. The judge may, on the one hand, be thought of as an intermediary who finds out and clarifies what the existing law is when problems of coordination arise (Hayek 1979); the judge does not create the law, but merely identifies and enforces the existing customs and conventions. As a result, new legal institutional rules emerge *bottom up* through making explicit the tacit knowledge of how things are commonly done (effect *Ia*), and through formalizing the conventional understanding of the practice under trial (effect *IIa*). On the other hand, legal theorists such as Richard Posner (2007) argue that considering custom as the only basis for legal institutional rules is problematic. The judge will often need to act as an innovator, enacting the rules of the game *top down*, thus creating the law, effectively molding existing customs, conventions and shared beliefs (effect *Ib*), and constraining the expectations of agents regarding possible future resource allocation outcomes (effect *IIb*). It is important to point out that courts, unlike legislatures, are passive in adapting the institutional rules to changing conditions. Courts cannot initiate changes in the legal rules unless they are asked to do so. For this reason, the capacity of the institutional regime to adapt through judicial decisions will depend on the willingness of some defendants to “invest in seeking rule change, [and] on judicial willingness to entertain the case for rule change” (Hadfield 2011: 84). If entrepreneurs consider the relative costs

of informing the courts to be too high, or if judges do not perceive the expected benefits of the rule change as good enough compared to the possible downsides, changes in current practices will not be continuously followed by changes in legal institutional rules.



Finally, it becomes apparent that there are circularities in the political process. The two-way relationship in *Ib* and *IIa* between beliefs and institutions points to the fact that change in institutional rules is both a product and a source of change in shared beliefs: “institutions are both causing and caused, and the same goes for ideas” (Kuran 1995: 298). Changes in one aspect of the political process may be amplified through this circularity and have disproportionate effects on other variables. A judicial decision, for example, may introduce a small but important legal innovation that will set the stage for major social breakthroughs. This circular property of the political process implies possible discontinuities in the evolution of different aspects of knowledge; punctuations observed in the evolution of social outcomes will often be a result of small cumulative changes in a process which feeds back into itself.

The complex nature of the political processes that link entrepreneurial imagination with political leadership through the channels of shared beliefs and institutional rules implies that a large part of the social outcomes resulting from individual actions and interactions is bound to be unconstructed and unintended (Kuran 1995: 302-305). Furthermore, the circular nature of the political processes and the complexity of social evolution will often make it difficult to identify unambiguously causal effects in explaining historical outcomes; in any particular historical case, however, “one component of a circular relationship may override all others” (Kuran 1995: 299). I contend that particularly in cases in which the permissibility of new combinations is uncertain – when market-supporting institutions are not established and when cultural categorization is ambiguous with regard to the proper and permissible uses of novel artifacts – entrepreneurs are agents of institutional change. By making others take part in carrying out new combinations, entrepreneurs promote consensus, which often leads to changes in the rules of the game by means of political processes. Entrepreneurial efforts that shape

conventional interpretations of novel artifacts set legitimate boundaries for institutional changes and breed experimentation with emergent social arrangements. To illustrate the entrepreneurial theory of institutional change, I present the case of surrogate motherhood, which demonstrates the significance of entrepreneurial persuasion in translating a technically feasible method into current practice.

3 Technological constraint: Artificial reproduction

Surrogate motherhood had been technically feasible for quite some time before it came to be practiced as a solution to the problems of infertility. But it was not until the end of the 1970s, when adoption market shortages increased the demand for substitutes, that entrepreneurs started introducing these new combinations of available medical procedures. Eventually, it turned out that the technological constraints would not be the primary obstacle to turning surrogacy into current practice.

Surrogate motherhood is a contractual separation of the “genetic, gestational, and rearing aspects of procreation” (Wadlington 1983: 421), made possible by virtue of scientific and technological progress. Surrogacy is an agreement to conceive a child by a means other than sexual intercourse. The agreement can be formalized through a contract, or it can remain informal, based on the acceptance of a promise to conceive, bear and relinquish a child. The service can be compensated or it can be a gift. A distinction is commonly made between traditional surrogacy and gestational surrogacy.

In traditional surrogacy, surrogates “donate” their reproductive cells and gestate a child who is relinquished after birth. The male reproductive cells may be provided by the man hiring the surrogate or by a donor. The surrogate is artificially inseminated and the child, after he or she is born, becomes a child of the person who hired the surrogate, through the process of adoption. In gestational surrogacy, on the other hand, the surrogate – who merely carries an embryo created in vitro – is not genetically related to the child. In such a case, the reproductive cells can be provided by the commissioning parents or by donors. Parenthood is usually established by means of a pre-birth order that formalizes the intent of the parties to the agreement before the child is born.

Assisted reproductive technologies (ARTs), particularly artificial insemination (AI) and in vitro fertilization (IVF), have been essential for the practice of surrogacy, and it was the change in circumstances in the adoption market during the late 1970s and early 1980s that invited entrepreneurs to combine the available methods in new ways and to introduce surrogate motherhood as a solution to problems of infertility.¹⁶

¹⁶Often the biblical handmaiden Hagar has been presented as the archetypal surrogate. In fact, a number of US clinics used the name Hagar as a means to legitimize their enterprises in the early 1980s. Hagar, who gave birth to Abraham’s child, however, cannot be considered the first surrogate. She became one of Abraham’s wives, gave birth to his son Ishmael and was unquestionably the mother of that child. For a discussion, see Krimmel (1983), De Marco (1987) or Rothman (1988).

The discovery of human reproductive cells took place in the 17th century. It was the discovery of ova and spermatozoa that made systematic progress in reproductive technology possible.¹⁷ While the first successful cases of human artificial insemination were reported in the 19th century,¹⁸ the application of this technique remained quite limited for the decades to come because of moral and legal questions.¹⁹ Until the 1970s, there were no efforts to apply this method in a way that would challenge the traditional belief that a woman who gives birth to a child is the legal mother. The first successful application of IVF, resulting from a dozen years of research carried out by Robert Edwards and Patrick Steptoe, took place in 1978. This method was not applied in the context of surrogate motherhood until 1985.

In the 1970s, for various reasons, the number of suitable children available for adoption in the United States dropped.²⁰ Even though the demand for adoptive children was not growing, the decreased supply of babies for adoption resulted in a shortage, long waiting lists and a black market. As a result, there was an increased demand for substitutes. Patrick Steptoe, who first successfully applied in vitro fertilization, initially said “he would be prepared to use the technique in a birth involving a surrogate mother where there would be good medical indications for doing so,”²¹ but after a short time he became painfully aware of the need to get others to take part in carrying out the new technology. In 1980, he even argued against the application of IVF in surrogacy: “You can’t just stick some egg and sperm together in a culture medium. ... The use of surrogate mothers to carry the child for another couple should not be practiced ... In effect the medical situation is then replaced by a much more complicated medical-legal situation.”²² Steptoe’s change of heart reflects the existence of institutional obstacles that would ultimately determine how useful the new practice would become.

¹⁷The discovery that “all animals – including humans – come from eggs” took place in 1665. Twelve years later, in 1677, the use of the microscope to study bodily fluids led to “one of the most stupendous discoveries in the history of science: the observation of spermatozoa” (Cobb 2012: 2).

¹⁸“The first reported case of [homologous] artificial insemination of a human being occurred in 1799, when a husband’s semen was used to impregnate his wife. AIH [homologous artificial insemination] occurred more frequently in England after this early success and subsequently spread to France. ... An American researcher recorded successful experimentation with AIH as early as 1866, but he voluntarily abandoned the technique, perhaps worried that it was immoral” (Smith 1968: 129).

¹⁹Artificial insemination was mostly a secret practice. Smith (1968: 129) estimates that “during this century, an average of 1,000-1,200 artificial-insemination children have been conceived in the United States each year.” Wadlington (1969: 785) adds that “the educated guesses even within the medical profession vary widely. Recent estimates of the annual number of births through AID range from 1,000 to more than 20,000.”

²⁰The fall in the number of babies available for adoption in the 1970s has been mentioned in Bachrach (1986), Berkov (1976), Landes (1978) and Posner (1987, 1989), among others. The shortage might be explained by the interplay of several factors – the greater availability of contraception and abortion, and the changing economic and social circumstances of single mothers. Generally, it is the case that the number of suitable unwanted babies fell in the 1970s.

²¹Surrogate Mothers Seen In Future, Ottawa Citizen, September 8, 1979.

²²Test-tube Births Face Medical, Legal Pitfalls, Saskatoon (Saskatchewan) Star-Phoenix, March 10, 1980.

It was the demand for alternative methods of conception that motivated the application of available medical procedures in new ways. The bundling of artificial insemination with private adoption and the first successful application of in vitro fertilization were two instances of assisted reproductive technology that offered new solutions to the problem of the shortage of adoptive children. While the procedures of artificial insemination and in vitro fertilization are fairly straightforward, it was the institutional constraints that turned out to be the primary obstacle that many couples who desired to conceive a child using the services of a surrogate would have to overcome in the upcoming years. The transformation of technological possibilities into useful medical practices would turn out to be a major entrepreneurial task.

4 Institutional constraint: Mater semper certa est

In the late 1970s, the first practitioners of surrogacy who employed “technically feasible but legally unrecognized solutions to marital or reproductive difficulties often must [have acted] without being certain of the legal consequences” (Keane 1980: 147). When narrowly interpreted, the existing institutional rules of procreation would unintentionally render surrogacy illegal. Yet “the illegality of surrogate motherhood contracts does not reflect any conscious policy decision to outlaw the practice: the illegality is the unintended consequence of decisions made in dealing with altogether different situations” (Keane 1980: 169). If surrogacy were to become a feasible option for childless couples, it would have to become permissible; that is, the existing institutional categories would have to be reinterpreted and the new practice would have to become accepted. The first entrepreneurs of surrogacy challenged the usual way of doing things by advocating the new practice and by questioning the interpretation of the prevailing legal rules.

Legal institutions regulating artificial insemination,²³ embryonic experimentation and research,²⁴ child adoption,²⁵ contraception laws,²⁶ abortion laws,²⁷ institutions establishing parentage, constitutional rights granting freedom of procreative expression,²⁸ and constitutional limits on legal discrimination based on an illegitimate status²⁹ were some of the existing legal institutions that influenced the legal standing of surrogacy at the time of its introduction. Although the statutes and policies embod-

²³The first statute regulating artificial insemination was adopted in 1964 in Georgia (GA. CODE ANN. § 19-7-21). In 1983 there were 23 other states where artificial insemination legislation was in force (Wadlington 1983).

²⁴See Flannery (1978: 1300).

²⁵Posner (1994) notes that the “common law did not recognize adoption. Recognition came in American statutes passed in the middle of the nineteenth century; the first English statute authorizing adoption was not passed until 1926.”

²⁶See Eisenstadt v. Baird, 405 U.S. 438 (1972) and Griswold v. Connecticut, 381 U.S. 479 (1965).

²⁷See Roe v. Wade, 410 U.S. 113 (1973).

²⁸See Skinner v. Oklahoma, 316 U.S. 535 (1942).

²⁹The rights to establish a parent-child relationship have generally been determined by the legal status of the marriage contract (see Wagner 1990).

ied within these institutions had not been employed with surrogacy in mind, surrogacy agreements would become constrained by them.

At the end of 1970s there were several reasons why the current institutions might have been inadequate to serve the purposes of the new technological developments. If narrowly interpreted, the regulations designed to deal with child adoption and artificial insemination would have introduced serious difficulties for anyone interested in surrogacy. Statutes regulating adoption were troublesome for surrogacy due to their restrictions on private adoption and their curbs on payments for consenting to adoption.³⁰ These two measures were aimed at preventing the sale of babies, which, as was to be argued, was not a problem related to surrogacy. Statutes regulating artificial insemination also introduced difficulties for surrogacy agreements. First, the conception of children outside wedlock would, according to the existing legal categories, be classified as adultery;³¹ second, the illegitimacy of children born as a result of surrogacy arrangements was also a difficult problem raised by the current institutions; finally, the question of establishing parental status would also not be resolved satisfactorily by the existing institutional ordering of human procreation.³²

4.1 Pioneering jurists: Without formal legal enforcement, it all gets down to trust

The first surrogate motherhood agreement was arranged in 1976 by Noel Keane, who started a Michigan-based surrogate motherhood agency. In the next few years, the new procedures of assisted reproduction started spreading among specialists in other states. By February 1980, Keane represented about a dozen couples.³³ By April 1980, Richard Levine, a physician from Kentucky, had 25 surrogates under contract. As William Handel, who by January 1983 had helped arrange six surrogate births in North Hollywood, pointed out: “Anybody can go out and put up a sign and say that they are in the surrogate parenting business.”³⁴ Harriet Blankfield, who started a Maryland-based surrogate motherhood agency, said that her goal was “to have offices around the country, and maybe in England, the Middle East and Western Europe. I want to see this company become the Coca-Cola of

³⁰Private adoptions were not allowed in some states. This means that all adoptions were required to take place through a licensed adoption agency that matched children with parents interested in adoption. In a surrogacy agreement the “relinquishment of the child to the sperm donor (and possibly his wife, if he is married) ... would be equivalent to a private adoptive placement” (Wadlington 1983: 492) and would thus be illegal.

³¹This is because the surrogate must be impregnated by a man who is not married to her and therefore “one of the biological parents of the resulting offspring is married to someone else” (Keane 1980: 149).

³²Keane argued that problems arise when the surrogate is not married. “Because the child of a single surrogate mother is born out of wedlock, he is definitely illegitimate. Traditionally such a status carried numerous legal disabilities, especially with respect to inheritance” (Keane 1980: 150). For the examination of a potential conflict between the existing legal provision and the practice of surrogacy with regard to determining parentage, see Wadlington (1983: 469, 484, 491).

³³Stand-In Mother - Surrogate Mother Agrees to Bear Child for Married Couple, Washington Post, Feb. 11, 1980.

³⁴Surrogate Motherhood Becoming an American Growth Industry, Washington Post, Jan. 24, 1983.

the surrogate parenting industry.”³⁵ Keane estimated that by 1983 there were about twenty surrogate parenting services in the country.

In order to be clear about the legal consequences of running a surrogate motherhood business, these entrepreneurs of surrogacy started questioning the adequacy of the current institutional rules of procreation for the purposes of their enterprises. Richard Levine, for example, asked the Kentucky officials for advice on how his program should be run so that it could “continue to serve without embarrassing the people of this commonwealth.”³⁶ Kentucky’s Attorney General replied that his office was “preparing an advisory legal opinion which [would] address these issues.” He added, however, that “there are some statutes that may well raise some problems with this process.”³⁷ Meanwhile, as a result of a number of media appearances, Noel Keane’s Michigan office had received “letters from 600 people across U.S. and Canada looking for surrogate mothers.”³⁸ Keane, who appeared, for example, “on CBS’ ‘60 minutes’ ... to discuss the issue [of what happens when] ... both the father and the surrogate mother are married – but not to each other,”³⁹ held that surrogacy is “something that’s going to keep on happening, and it’s an area that just cries out for legislation.”⁴⁰

A Delaware couple contacted Noel Keane after seeing the Michigan matchmaker on the Phil Donahue show: “It may sound selfish,” admitted the father-to-be when explaining his motives, “but I want to father a child on my own behalf, leave my own legacy. And I want a healthy baby. And there just aren’t any available.” The problem was that Keane could not find enough surrogates who would be willing to do it for free: “If we could pay women \$5,000 to \$10,000, everyone could have a surrogate.”⁴¹ As far as paid surrogacy was concerned, however, the political entities were not convinced. In Michigan, a Wayne County Circuit Judge wrote: “The State’s interest is to prevent commercialism from affecting a mother’s decision to execute a consent to the adoption of her child. It is a fundamental principle that children should not and cannot be bought and sold.” Along the same lines a Kentucky Attorney General argued: “We have a very strong public policy in Kentucky against baby buying, and one of the very strong concerns that we have is the monetary aspects of this practice.”⁴² Eventually, the Kentucky Attorney General would ask the Franklin Circuit Court to issue a permanent injunction against Levine’s Surrogate Parenting Associates Inc.

Robert Harrison, an attorney working with Noel Keane, explained what the unintended consequences of the law might be: “You can pay a surrogate mother all you want if you don’t adopt a

³⁵The Surrogate Baby Boom, Washington Post, January 25, 1983.

³⁶At Least A Dozen Other Surrogate Mothers in Kentucky Program, Associated Press, Nov. 15, 1980.

³⁷Issue and Debate: When Women Bear Children for Others, New York Times, Dec. 22, 1980

³⁸Aid to Childless Pair, Lodi News-Sentinel, February 13, 1980.

³⁹Suit to Test Surrogate Parent’s Rights, The Bryan Times, November 14, 1981

⁴⁰Issue and Debate, New York Times, December 22, 1980

⁴¹Stand-In Mother, Washington Post, February 11, 1980.

⁴²Issue and Debate, New York Times December 22, 1980

child. ... You can get any child, take custody, raise him, do anything but adopt him. ... There is a black market in babies today ... and we're trying to prevent that from existing."⁴³

While wrestling with the restrictions on paid surrogacy, Keane filed a "friendly" lawsuit in Michigan to clarify whether a biological father could be listed on the birth certificate after a baby was born as a result of a surrogacy agreement. "We're fighting an old law designed for other purposes," lamented Keane, hoping that the Wayne County judge would soon make his decision public so as to "set a precedent for a series of similar cases – eight or 10 of them – which we have coming up very soon."⁴⁴ Eventually, the judge dismissed Keane's petition, explaining that "[t]he courts are not in the business of making law ... we're in the business of interpreting law,"⁴⁵ adding that because "the court does not have jurisdiction in the matter, ... the remedy lies in the state Legislature." As the Michigan Assistant Attorney General added, "Mr. Keane should go to the Legislature and get the law changed if he finds it onerous."⁴⁶

The entrepreneurs of surrogacy in other jurisdictions generally followed the same steps as Keane and Levine. Harriet Blankfield, the director of The Miracle Program, Inc., said that the founders of the company "have spoken with representatives of the state government trying to determine if we need any permits, but we have found there are no regulations or guidelines in Maryland governing surrogate parenting."⁴⁷ Blankfield said it seemed her agency would thus not be required to obtain a license. In Philadelphia, another firm called Surrogate Mothering Ltd. was formed in April 1981 by an infertility specialist, a psychologist and an attorney. As Michael Birnbaum, the infertility specialist, put it: "There is no legal position in Pennsylvania. ... It's not legal and it's not illegal. In a sense we are creating law."⁴⁸

A surrogacy agreement is nothing other than a long-term contract, which, by the nature of things, is bound to be incomplete. An incomplete long-term contract introduces monitoring problems that are well-known from principal-agent models, for as long as the contract is not enforceable, the parties cannot be reasonably certain about what happens if there is a default. "Actually, 'contract' is too strong a term," Keane pointed out, suggesting that "since the surrogate mother arrangement does not yet have the force of law, it is best to refer to it as an 'agreement'." Keane recognized very well that without formal legal enforcement, "it all gets down to trust."⁴⁹ All the entrepreneurs of surrogacy sought to step out of the shadow of informality so as to clear up the environment of legal uncertainty and to substitute trust with formal methods of contract enforcement.

⁴³Judge Rejects Couple's Petition To Use 'Surrogate' Mother, Associated Press, Jan. 29, 1980.

⁴⁴Judge To Rule on Custody Case Involving Surrogate Mother, New York Times, Nov. 15, 1981.

⁴⁵Surrogate Mother Issue Remains Unresolved, United Press International, Nov. 26, 1981.

⁴⁶Judge Issues Ruling In Surrogate Mother Case, Wilmington Star, Nov. 26, 1981.

⁴⁷Firm Provides Surrogate Mothers, United Press International, March 2, 1982

⁴⁸East Coast Contract Baby Born to Surrogate Mother, Pittsburgh Press, Dec. 28, 1982

⁴⁹Associated Press, Frankfort (Kentucky), December 2, 1981.

The entrepreneurs questioned whether the then current adoption and paternity laws applied to the new phenomenon of surrogacy. To answer this question would require to make it clear whether the currently existing rules covered the set of new contingencies, but the problem of interpreting the rules mirrored the problem of how the phenomena resulting from the application of new technologies should be defined: How do we interpret the act of birth in the context of the new assisted reproductive technology? With the introduction of artificial insemination and in vitro fertilization, the traditionally accepted belief that a woman who gives birth to a child becomes, by the act of birth itself, a legal mother was challenged. The introduction of surrogacy meant that the context became essential in determining the legal mother. If it is generally believed that the birth mother is also the legal mother, no matter what, then surrogacy must resemble a regular adoption and the existing rules of the game should apply. If, however, surrogacy is considered to be an arrangement in which the surrogate merely nourishes someone else's unborn child, the existing rules are inadequate.

4.2 Reinterpreting motherhood and legitimating surrogacy

From the late 1970s, the entrepreneurs of surrogacy questioned the adequacy of the existing institutional rules for regulating the application of the new assisted reproductive technologies. By provoking the interpretive shift that introduced alternative criteria for establishing parenthood, entrepreneurs attempted to convince others that surrogacy should be distinguished from adoption. Entrepreneurs also advocated the practice of surrogacy, promoted consensus, and presented arguments for why surrogacy should be considered a praiseworthy endeavor.

4.2.1 Mother by intention, not by genes or gestation

Attempts at reinterpreting the concept of motherhood can be traced back to March 1978. In what would be the first adoption of its kind, a Wayne County judge approved the adoption of a child born to a surrogate who was artificially inseminated. Filing this case was one of the first steps through which Noel Keane aided the process of reinterpreting the existing rules, designed without surrogacy in mind. The approved adoption was an important step because, under the Michigan law at the time, "a woman who wants to give up her baby must surrender the child to a certified state adoption agency."⁵⁰ As Keane pointed out, this "is the first case [of a surrogacy agreement] completed through the legal cycle ... It's finally been disclosed on the surface that a surrogate has done it for someone else, not just raised the child on their own without telling anyone."⁵¹

⁵⁰Associated Press, Detroit, March 28, 1979.

⁵¹Child Born to Surrogate Mother Legally Adopted By Father And His Wife, St. Petersburg (Florida) Evening Independent, March 30, 1979.

A few months later, in May 1978, to determine whether a woman could be paid to have a child for another couple by artificial insemination, Keane filed another case with the State Attorney General's Office. After two years, however, applying the Michigan adoption code, the Wayne County judge rejected Keane's petition to determine the legal status of paid surrogacy. Finally, in May 1981, the Michigan Court of Appeals upheld the application of the adoption law prohibiting the paid adoption of a child. Importantly, in both of these Michigan cases, the judge interpreted the adoption code to cover the practice of surrogacy. In both cases, the birth mother was also the legal mother.

The first case of what would become known as gestational surrogacy took place in August 1985, when the Cleveland Mount Sinai Medical Center performed the first embryo transplantation employing a surrogate mother.⁵² Prior to the birth, the genetic parents filed a petition to be declared the parents of the child. "This is the first time that a birth mother will not be placed on the birth certificate," explained Keane, who arranged the agreement. He added that the petition established a serious challenge to the way we interpret the act of birth: "We have always assumed that the woman who gives birth is the mother. In this particular case, the mother has no legal right to the child."⁵³ When the woman who gives birth to a child is not considered to be the legal mother, the adoption laws do not apply; the commissioning parents' names are entered on the birth certificate after the birth of the child and no adoption is needed.

The uncontested petition was supported by a Michigan circuit judge, who declared the couple to be the legal biological parents of the unborn child in what was the first opinion on the parentage of a child carried by a gestational surrogate. As Judge Battani, who made the ruling, pointed out, "we really have no definition of 'mother' in our lawbooks. 'Mother' was believed to have been so basic that no definition was deemed necessary."⁵⁴ In effect, Battani's declaration of parenthood distinguished surrogacy from traditional adoption, and introduced competing legal doctrines from which motherhood might be established and according to which different definitions of 'mother' could apply. As well as the criteria of motherhood by gestation and motherhood by genes, the criterion of intent was now to be considered.⁵⁵

⁵²Wulf H. Utian, who performed the IVF, said he "would presume it's a world's first" transplantation in which the child born to a surrogate would have the genetic characteristics of the commissioning parents (United Press International, "Woman To Have Friends' 'Test Tube' Child," August 27, 1985). In a letter to *The New England Journal Of Medicine*, Utian mentioned that, although there was no chance of the couple having their own child, due to the cesarean hysterectomy of the wife, "the couple remained strongly committed to having their own genetic child and requested that our in vitro program consider embryo transfer to the uterus of a friend who was interested and willing to act as a surrogate" (Utian et al. 1985: 1352). The Mount Sinai Clinic did not have a surrogacy program and the procedure was carried out only because of the special circumstances.

⁵³Free Lance-Star, Virginia, February 21, 1986.

⁵⁴Court Ruling May Pave The Way, Ludington Daily News, March 14, 1986.

⁵⁵For a discussion of the legal doctrines for establishing parenthood, see, for example, Snyder (2006) or Spivack (2010).

After the first gestational surrogacy case in which a pre-birth order was issued, institutional challenges presented by surrogate motherhood arrangements continued with another case resulting from the activities of Noel Keane's surrogate motherhood agency. In a well-known trial that started in January 1987, a New Jersey judge, Harvey Sorkow, set out to decide on the validity of a surrogacy contract and on the custody of a child after a surrogate, who was genetically related to the child, decided to break the agreement and keep the newborn baby girl. On March 31, 1987, Judge Sorkow decided that the surrogacy contract was valid and enforceable and that the best interests of Melissa, better known as Baby M, would be served by her being placed in her father's sole custody.

In the case of a contested surrogate motherhood agreement, the legal doctrines for establishing motherhood collide. If the traditional way of establishing motherhood by gestation is applied, the surrogate becomes the legal mother of the child by the act of birth. To carry out the surrogacy agreement, an adoption is then necessary. On the other hand, applying the doctrine of motherhood by intent disregards the genetic and gestational relationship between the surrogate and the child. The act of birth turns the intended mother into the legal mother.

In the Baby M case, Sorkow gave greater weight to the doctrine of contractual intent as opposed to the doctrines of motherhood by gestation and genetics, and decided that the intent of the parties expressed by the contractual agreement should override the genetic and gestational relationship in establishing parenthood. In February 1988, however, the New Jersey Supreme Court overturned the lower court's decision and held "the surrogacy contract to be invalid for conflicting with both the laws and the public policy of the state"; according to the Supreme Court, "the promise to surrender the child, made before birth or even conception ... directly contradicted New Jersey adoption law, which allows for surrender only after the birth of the child, and after the mother is offered counseling" (Spivack 2010: 100). Contracts in which the surrogate would not have a chance to change her mind and where a payment was involved were thus considered to go against the code that had been designed to regulate adoptions.

With the decision of the New Jersey Supreme Court, the suggested reinterpretation of the existing institutional ordering of procreation seemed to have reached its limits. Consequently, "the surrogate's genetic relationship to the child in traditional surrogacies virtually always allows her to retain her legal parental rights to the child if she elects to do so. As a result, this type of surrogacy arrangement has become disfavored as other medical options have become available" (Snyder and Byrn 2006: 640). Applying the traditional doctrines of motherhood by gestation and motherhood by genes calls for the family law approach to traditional surrogacy; this approach renders the enforcement of surrogacy contracts problematic, as no judge will enforce such a contract against a woman who changes her mind.

After the Baby M case, the criteria for establishing motherhood varied depending on the nature of the surrogacy agreement. In the early 1990s, Anna Johnson, a Californian surrogate, agreed to bear a child for Mark and Crispina Calvert. Although she was not genetically related to the child, Johnson filed a suit asking for custody. After the lower court enforced the contract against Johnson, the surrogate appealed to the California Supreme Court. The Supreme Court ruled that gestational surrogacy contracts are enforceable and do not violate public policy; therefore, in a case of a contested gestational surrogacy agreement, the *intentions* and the *aim* in conceiving the child should determine the parentage. With this decision, the California Supreme Court decision set a legal precedent that institutionalized the reinterpretation of the act of birth in the context of new assisted reproductive technology.

Within one decade, carrying out the new methods of assisted reproduction gave rise to an interpretive shift. As a result of this change, the traditional belief that a birth mother is also the legal mother came to be reconsidered. The incremental challenges introduced by the surrogate motherhood practitioners provoked a reinterpretation of the prevailing institutional ordering of procreation and in effect introduced competing definitions of motherhood. Although the interpretation of the existing institutional ordering of adoption and artificial insemination remained quite narrow in the case of traditional surrogacy, in the case of gestational surrogacy greater significance was given to establishing parenthood by contractual intent. The reinterpretation of existing institutional rules took place alongside public discussion on whether surrogacy is desirable; in turning the new methods of assisted reproductive technology into useful innovations, public approval of surrogacy was at least as important as the interpretation of the practice.

4.2.2 Raising awareness, growing approval

The economic activity of the individuals interested in new forms of assisted reproductive technology spurred public discussion, presented new information and raised awareness of surrogacy. The discussion took place in the media, in academic journals, in courts, and in the legislatures. Since the drafting of the first surrogate motherhood agreement in 1976, Noel Keane and a handful of other entrepreneurs actively engaged legislators, state representatives and judges of the states in which they were active, making the case that surrogate motherhood contracts should be tolerated. In particular, Keane and other surrogacy practitioners questioned the legitimacy of government intervention in the freedom to choose the means of procreation: “Insofar as surrogate motherhood arrangements among consenting and competent adults represent an exercise of personal liberty which is not detrimental to third parties or society, state interference with these arrangements on moralistic grounds may be unconstitutional” (Keane 1980: 166).

Keane was joined by entrepreneurs from different states who, along with some of the surrogates who decided to recount their experiences in public, started challenging the conservative shared beliefs that would curb their efforts to make surrogacy tolerated. While providing medical and legal services to new surrogates and commissioning parents, the entrepreneurs also continued to justify the moral aspects of the new activity. Litigation was instrumental in advocating surrogacy and informing the public discussion.

The Baby M trial, in which a dispute between the parties to a surrogacy agreement coordinated by Noel Keane's New York office was considered, exposed the practice of surrogate motherhood nationally through close scrutiny of the parties and their motivations. During the course of the trial, in the period from 1986 to 1988, several organizations were formed to shape the image of surrogacy and, perhaps, sway the court decision. The National Association of Surrogate Mothers and The American Organization of Surrogate Mother Services – founded by a former surrogate and by the head of a surrogacy agency, respectively – aimed to present a balanced image of surrogacy, provide appropriate information and lobby for legislation. These organizations, however, faced the opposition of established and emerging conservative groups, such as the American Fertility Society, which urged that surrogacy should be limited to the solution of valid medical problems, New Jersey's Roman Catholic Bishops, who called for a ban on the practice, considering surrogacy a "legal outrage and a moral disaster,"⁵⁶ and the National Coalition Against Surrogacy, which lobbied for a nationwide ban on surrogacy. During the course of the Baby M trial, the Vatican, in what might be considered a major intervention from a position of religious authority, called on governments to outlaw surrogacy:

The new technological possibilities which have opened up in the field of biomedicine require the intervention of the political authorities and of the legislator, since an uncontrolled application of such techniques could lead to unforeseeable and damaging consequences for civil society.⁵⁷

The trial motivated the conversation about surrogate motherhood, and increased public awareness about the questions brought up by surrogacy. In fact, according to national surveys, 63% of the US population was aware of the Baby M case in January 1987 when the trial started.⁵⁸ At the end of March, when the trial reached its conclusion, the estimated proportion of the population aware of the Baby M case had grown to 82%⁵⁹ and according to a Gallup Poll released in April after the lower

⁵⁶Surrogate Parenthood Laws Opposed by Jersey Bishops, New York Times, Dec. 4, 1986.

⁵⁷Congregation For The Doctrine Of The Faith, Instruction on respect for human life, March 1987, available at http://www.vatican.va/roman_curia/congregations/cfaith/documents/rc_con_cfaith_doc_19870222_respect-for-human-life_en.html.

⁵⁸Gallup/Newsweek Poll released on January 8, 1987.

⁵⁹Roper/U.S. News and World Report Poll, released on April 1, 1987.

court had presented its judgment, the estimated awareness had by then grown further to 94% of the population.⁶⁰

The lower court ruling that the surrogacy contract was valid and enforceable had a strong affirmative effect. In January, after the trial had just started, an estimated 59% of people believed that the surrogate mother should not have the right to change her mind.⁶¹ Surveys carried out after the decision showed that the proportion of people who agreed with the judges' ruling that the surrogate should live up to the agreement rose to about 72%.⁶² This boost in the approval for contractual enforcement can safely be attributed to the information revealed by the trial and to the subsequent decision made by Judge Sorkow.⁶³

The surveys also showed that the public judgment of the practice of surrogacy depended on the specific conditions of the agreement. This conditional approval was examined in two surveys carried out in January and May 1987, that is, at the beginning of and after the Baby M trial.⁶⁴ Both the January and the May surveys consistently showed that were the wife *unable* to bear a child, or should the pregnancy pose a significant health risk or birth defects be likely to occur, the majority approved of surrogacy (the approval in these cases ranged from 53% to 64%). On the other hand, if a woman did not *want* to bear a child, either because she was afraid of pregnancy or she wanted to focus on her career, the disapproval was strong, with close to 80% of the population disapproving. The motivation behind the agreement thus seems to make a difference, and the attitude towards surrogacy for convenience is strongly negative. These results point to issues that might have limited the scope of entrepreneurial persuasion. In general, however, entrepreneurial persuasion and the advocacy of non-traditional uses of the new methods seem to have been crucial in shaping the judgment on surrogacy.

In 1983, when little was known about the practice, fewer than 40% of the US population approved of surrogacy. In 1992, after a decade of public discussion and a number of court cases, the tide had begun to turn and 55% of Americans had approved. For further detail, see Table 1. The conversation about the ethics of surrogacy was advanced by means of public argumentation in the media, courts

⁶⁰Gallup Poll, released on April 13, 1987.

⁶¹Gallup/Newsweek Poll, released on January 8, 1987.

⁶²Conversely, the proportion of the population who disagreed with the ruling of Judge Sorkow and believed the mother had a right to change her mind dropped to 14% as compared to a January estimate of 26% who believed the surrogate mother should get custody if she changed her mind (Gallup/Newsweek Poll, released on January 8, 1987, CBS News/New York Times Poll released on April 8 1987 and Gallup Poll, released on April 13, 1987).

⁶³A survey conducted in May 1987 identified several reasons for opposing surrogacy (Kane, Parsons and Associates/Parents Magazine Poll, released on May 20, 1987). The most important of these was the strength of the maternal bond. The statement that "despite what a woman says before giving birth, the bond between mother and child is so strong after birth that many women find it too difficult to give up the baby" was convincing to 57% of the population. Second, 46% of the population found "too many legal problems surrounding surrogate motherhood" to be a convincing reason to oppose surrogacy.

⁶⁴Gallup/Newsweek Poll, released on January 8, 1987 and Kane, Parsons and Associates/Parents Magazine Poll, released on May 20, 1987.

Table 1: Approval/disapproval of surrogacy
Q: Judgment upon surrogate motherhood

	Approve (%)	Disapprove (%)
June 1983	39.28	41.78
January 1987	46.45	40.14
May 1992	55.04	32.40

Source: Gallup Poll, release date June 27, 1983; Time/Yankelovich Poll, release date January 21, 1987; Time/Yankelovich Poll/CNN Poll, release date May 14, 1992.

and state legislatures. Judicial trials provided greater exposure and deep scrutiny. It is necessary to point out the exploratory function of litigation.⁶⁵ The trials, for example, identified the major role of the psychological assessment of surrogates prior to their acceptance.⁶⁶ However, by pointing out the importance of psychological screening, the trials also showed the capacity of private agencies to manage the selection of suitable candidates for surrogacy. Even in conditions where the major enforcement mechanism was trust, only a negligible fraction of surrogates were reported to have defaulted on their agreements.⁶⁷

The conversation came to include academic scholars, public interest groups, church representatives, and political entities. All of these influenced the normative competition, which in turn became reflected in the public approval of surrogate motherhood. The parties to the public conversation about the ethics of surrogacy seem to have established the limits of entrepreneurial persuasion. Here the changes in interpretation and judgment intersect. First, it became clear that if a woman gives birth to a child to whom she is genetically related, no judge will break the maternal bond. The interpretation of the rights and responsibilities to which such an act of birth gives rise is straightforward, and the entrepreneurs of surrogate motherhood were not able to argue persuasively why in such a case the contract law approach should override the family law approach. Second, outsourcing pregnancy to

⁶⁵See Eisenberg et al. (2012) or Ramello (2012) on the function of trials in legal reform.

⁶⁶Both of the landmark cases involved surrogates who did not receive proper psychological screening. In the case of Whitehead, the psychological report that warned against her potential difficulties with parting from the child was lost and was not considered by the parents. In the case of Johnson, the psychological screening of the surrogate was bypassed as Johnson was contacted privately by the couple, who did not go through an agency selection process.

⁶⁷In 1986, Jan Sutton, the founder of The National Association of Surrogate Mothers, demonstrated the reliability of trust as an enforcement mechanism: “Out of the 300 to 500 births to surrogate mothers in this country, only three women have asked to keep the children they have borne” (Surrogate Moms Form Lobbying Group, Associated Press, November 12, 1986).

avoid inconvenience has generally been condemned in the eyes of the public, and therefore the enforcement of a surrogate motherhood contract motivated by mere convenience may lack broad public support.

Almost two decades after the first surrogacy agreement had been arranged, about twenty surrogacy laws were adopted (Andrews 1995). By 2004, there were twenty-four states that had adopted statutes directly relevant to surrogacy contracts. In Kuchař (2014), I examine the empirical relationship between changing beliefs and institutional rules, and the subsequent comparative effects of diverse institutional rules on allocation patterns. How did the changing public approval of surrogacy affect the legal institutional change embedding the new practice? What are the effects of the new legal institutions once they are in place? Entrepreneurs and political entities introduced institutional variety that has been tested through the process of interjurisdictional competition. As a result of this political competition, states with different institutional arrangements generated different outcomes in terms of surrogate motherhood pregnancy rates. The comparative institutional analysis suggests that between the years 2003 and 2010, states with judge-made surrogacy law systematically registered higher numbers of surrogate motherhood contracts than other states.

5 Conclusion

Entrepreneurs are agents of institutional change when market-supporting institutions are not established and when cultural categorization is ambiguous with regard to what the proper and permissible uses of new combinations are. This aspect of entrepreneurship has been neglected in the literature. The entrepreneur as proposed here challenges the common interpretations of social phenomena in light of new circumstances, and attempts to convince others to abandon the usual way of doing and understanding things. This aspect of entrepreneurship is conducive to institutional change.

Entrepreneurs may succeed in translating new concepts into reality. Without being tolerated, however, innovations are rather useless. When the proper and permissible application of novel artifacts is unclear, the entrepreneur must persuade others that carrying out the new combinations in a particular way is a desirable activity and in doing so, he helps set boundaries within which formal institutional rules can legitimately emerge. This aspect of entrepreneurship is distinct from arbitrage, contracting for property rights or introducing new products to existing markets. This type of entrepreneurship establishes cultural categories of marketable goods and the very markets in which these goods are exchanged.

To illustrate the entrepreneurial theory of institutional change, I have presented the case of surrogate motherhood, in which institutional adaptation followed a particular change in technology. Until the 1970s, there were no efforts to apply artificial reproductive technologies in a way that would chal-

lenge the traditional belief that a woman who gives birth to a child is the legal mother. The shortage of suitable children available for adoption, together with the first successful application of in vitro fertilization, made space for a change. New technological possibilities offered solutions to infertile couples suffering from the shortage of adoptive babies; however, the transformation of technological possibilities into useful medical practices would turn out to be a major entrepreneurial task. If surrogacy were to become a feasible option for childless couples, it would have to become permissible; that is, the existing institutional categories would have to be reinterpreted and the new practice would have to become accepted.

From the first successful application of in vitro fertilization in the context of surrogate motherhood, it took less than a decade to redefine the concept of motherhood and reform the institutional legal rules of procreation. Through incremental challenges, the practitioners of surrogate motherhood brought up competing definitions of motherhood and provoked the reinterpretation of the then current institutional ordering of procreation. Gradually, the traditional belief that a birth mother is also the legal mother came to be reconsidered. Finally, in the early 1990s, the California Supreme Court decision set a legal precedent that institutionalized the reinterpretation of the act of birth in the context of new technology.

In turning the new methods of assisted reproductive technology into useful innovations, public approval of surrogacy was at least as important as the changing interpretation of motherhood. While providing medical and legal services to new surrogates and commissioning parents, surrogacy practitioners went on justifying the moral aspects of the new activity, making sure that surrogacy would become tolerated. In advocating surrogacy and informing the public discussion, litigation was instrumental. In fact, in 1983, when little was known about the practice, less than 40% of the US population approved of surrogacy. In 1992, after a decade of public discussion and a number of court cases, 55% of Americans had begun to approve. From the early 1980s, surrogacy practitioners started filing court cases and knocking on the doors of the State Attorney's Offices. The resulting motions and trials had strong affirmative effects; they exposed the practice of surrogacy and raised awareness, contributing to shifts in shared beliefs with regard to the phenomenon of surrogate motherhood.

I present an entrepreneurial theory of institutional change illustrated by the case of surrogate motherhood, which I suggest is an example of a more general problem. When we look at economic evolution as a non-deterministic but also non-random process, we may understand better the origins of market-supporting institutions. While taking into account the creative dynamics of economic evolution, we may find that innovations and market-supporting institutions are not caused by entrepreneurial opportunities, but rather that specific forms and shapes of human exchange interactions are enabled by new circumstances that motivate creativity, new combinations and new interpretations

of economic, social and political phenomena. In this, economic analysis relies on economic laws predicting broad patterns of emergence.

References

- Acemoglu, D., Johnson, S., and Robinson, J. A. (2005). Institutions as a fundamental cause of long-run growth. *Handbook of economic growth*, 1:385–472.
- Acemoglu, D. and Robinson, J. A. (2012). *Why Nations Fail: The Origins of Power, Prosperity, and Poverty*. Crown Publishers, New York.
- Alvarez, S. A. and Barney, J. B. (2007). Discovery and creation: Alternative theories of entrepreneurial action. *Strategic Entrepreneurship Journal*, 1(1-2):11–26.
- Anderson, T. L. and Hill, P. J. (1975). The evolution of property rights: A study of the american west. *Journal of Law and Economics*, 18(1):163–179.
- Anderson, T. L. and Hill, P. J. (1990). The race for property rights. *Journal of Law and Economics*, 33(1):177–197.
- Andrews, L. B. (1995). Beyond doctrinal boundaries: A legal framework for surrogate motherhood. *Virginia Law Review*, 81:2343.
- Aoki, M. (2011). Institutions as cognitive media between strategic interactions and individual beliefs. *Journal of Economic Behavior & Organization*, 79(1-2):20–34.
- Arrow, K. J. (1974). Limited knowledge and economic analysis. *The American Economic Review*, 64(1):xiii–10.
- Bachrach, C. A. (1986). Adoption plans, adopted children, and adoptive mothers. *Journal of Marriage and Family*, 48(2):243–253.
- Battilana, J., Leca, B., and Boxenbaum, E. (2009). How actors change institutions: Towards a theory of institutional entrepreneurship. *Academy of Management Annals*, 3(1):65–107.
- Baumol, W. J. (1990). Entrepreneurship: Productive, unproductive, and destructive. *The Journal of Political Economy*, 98(5):893–921.
- Berkov, B. and Sklar, J. (1976). Does illegitimacy make a difference? A study of the life chances of illegitimate children in California. *Population and Development Review*, 2(2):201–217.

- Boettke, P. J. and Coyne, C. J. (2007). Context matters: Institutions and entrepreneurship. *Foundations and Trends in Entrepreneurship*, 5(3):135–209.
- Casson, M. (1982). *The entrepreneur: An economic theory*. Rowman & Littlefield.
- Coase, R. (1937). The nature of the firm. *Economica*, 4(16):386–405.
- Cobb, M. (2012). An amazing 10 years: The discovery of egg and sperm in the 17th century. *Reproduction in Domestic Animals*, 47.
- De Marco, D. (1987). The conflict between reason and will in the legislation of surrogate motherhood. *American Journal of Jurisprudence*, 32:23.
- Dew, N. (2008). On effectuation and new markets. In *Effectuation: elements of entrepreneurial expertise*, pages 240–254. Edward Elgar, Cheltenham, Glos, UK; Northampton, MA.
- Dew, N., Read, S., Sarasvathy, S. D., and Wiltbank, R. (2011). On the entrepreneurial genesis of new markets: Effectual transformations versus causal search and selection. *Journal of Evolutionary Economics*, 21(2):231–253.
- Downs, A. (1957). An economic theory of political action in a democracy. *The Journal of Political Economy*, pages 135–150.
- Earl, P. E. and Potts, J. (2004). The market for preferences. *Cambridge Journal of Economics*, 28(4):619–633.
- Eckhardt, J. T. and Shane, S. A. (2003). Opportunities and entrepreneurship. *Journal of management*, 29(3):333–349.
- Eisenberg, T., Robinson, N., and Kalantry, S. (2012). Litigation as a measure of well-being.
- Epstein, R. A. (1995). *Simple Rules for a Complex World*. Harvard University Press.
- Flannery, D. M., Weisman, C. D., Lipsett, C. R., and Braverman, A. N. (1978). Test tube babies: Legal issues raised by in vitro fertilization. *Geo. LJ*, 67:1295.
- Foss, N. J., Klein, P. G., Kor, Y. Y., and Mahoney, J. T. (2008). Entrepreneurship, subjectivism, and the resource-based view: Toward a new synthesis. *Strategic Entrepreneurship Journal*, 2(1):73–94.
- Fuller, L. L. (1969). *The Morality of Law: Revised Edition*. Yale University Press, revised edition.
- Godley, A. C. and Casson, M. C. (2014). 'Doctor, Doctor...' entrepreneurial diagnosis and market making. *Journal of Institutional Economics*, pages 1–21.

- Görling, S. and Rehn, A. (2008). Accidental ventures - a materialist reading of opportunity and entrepreneurial potential. *Scandinavian Journal of Management*, 24(2):94–102.
- Greif, A. and Tadelis, S. (2010). A theory of moral persistence: Crypto-morality and political legitimacy. *Journal of Comparative Economics*, 38(3):229–244.
- Hayek, F. A. (1979). *Law, legislation, and liberty: The political order of a free people (Vol. 3)*. Chicago: University of Chicago Press.
- Henrekson, M. and Sanandaji, T. (2011). The interaction of entrepreneurship and institutions. *Journal of Institutional Economics*, 7(01):47–75.
- Hodgson, G. M. (2007). Institutions and individuals: Interaction and evolution. *Organization studies*, 28(1):95–116.
- Hodgson, G. M. and Calatrava, J. (2006). What are institutions. *Journal of Economic Issues*, 40(1):1.
- Hodgson, G. M. and Knudsen, T. (2010). *Darwin's Conjecture: The Search for General Principles of Social and Economic Evolution*. University Of Chicago Press, Chicago; London.
- Hodgson, G. M. and Knudsen, T. (2012). Agreeing on generalised Darwinism: A response to Pavel Pelikán. *Journal of Evolutionary Economics*, 22(1):9–18.
- Howitt, P. and Clower, R. (2000). The emergence of economic organization. *Journal of Economic Behavior & Organization*, 41(1):55–84.
- Keane, N. P. (1980). Legal problems of surrogate motherhood. *S. Ill. ULJ*, 5:147.
- Kirzner, I. M. (1973). *Competition and Entrepreneurship*. University of Chicago Press.
- Klamer, A. (2011). Cultural entrepreneurship. *The Review of Austrian Economics*, 24(2):141–156.
- Klein, P. G. (2008). Opportunity discovery, entrepreneurial action, and economic organization. *Strategic Entrepreneurship Journal*, 2(3):175–190.
- Koppl, R., Kauffman, S., Felin, T., and Longo, G. (2014). Economics for a creative world. *Journal of Institutional Economics*, FirstView:1–31.
- Krimmel, H. T. (1983). The case against surrogate parenting. *The Hastings Center Report*, 13(5):35–39.

- Kuchař, P. (2014). The birth of surrogate motherhood law: An economic analysis of institutional reform. Paper presented at The International Society for New Institutional Economics Conference (ISNIE), Durham.
- Kuran, T. (1995). *Private truths, public lies: the social consequences of preference falsification*. Harvard University Press, Cambridge, Mass.
- Landes, E. M. and Posner, R. A. (1978). The economics of the baby shortage. *The Journal of Legal Studies*, 7(2):323–348.
- Levi, M., Sacks, A., and Tyler, T. (2009). Conceptualizing legitimacy, measuring legitimating beliefs. *American Behavioral Scientist*, 53(3):354–375.
- Li, D. D., Feng, J., and Jiang, H. (2006). Institutional entrepreneurs. *The American Economic Review*, 96(2):358–362.
- Libecap, G. D. (1978). Economic variables and the development of the law: The case of western mineral rights. *The Journal of Economic History*, 38(02):338–362.
- Libecap, G. D. (1994). *Contracting for Property Rights*. Cambridge University Press.
- McCloskey, D. and Klammer, A. (1995). One quarter of GDP is persuasion. *The American Economic Review*, 85(2):191–195.
- McCloskey, D. N. (2010). *Bourgeois Dignity: Why Economics Can't Explain the Modern World*. University Of Chicago Press.
- Meerhaeghe, M. A. G. v. (2003). The lost chapter of Schumpeter's 'Economic Development'. In Backhaus, J., editor, *Joseph Alois Schumpeter: Entrepreneurship, Style and Vision*, The European Heritage in Economics and the Social Sciences, pages 233–243. Springer US.
- Ménard, C. (1995). Markets as institutions versus organizations as markets? Disentangling some fundamental concepts. *Journal of Economic Behavior & Organization*, 28(2):161–182.
- Mokyr, J. (2013). Cultural entrepreneurs and the origins of modern economic growth. *Scandinavian Economic History Review*, 61(1):1–33.
- North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press.
- North, D. C. (2005). *Understanding the Process of Economic Change*. Princeton University Press, revised edition.

- Pacheco, D. F., York, J. G., Dean, T. J., and Sarasvathy, S. D. (2010). The coevolution of institutional entrepreneurship: A tale of two theories. *Journal of Management*, 36(4):974–1010.
- Pelikán, P. (2011). Evolutionary developmental economics: How to generalize Darwinism fruitfully to help comprehend economic change. *Journal of Evolutionary Economics*, 21(2):341–366.
- Pelikán, P. (2012). Agreeing on generalized Darwinism: a response to Geoffrey Hodgson and Thorbjørn Knudsen. *Journal of Evolutionary Economics*, 22(1):1–8.
- Persson, T. and Tabellini, G. E. (2000). *Political Economics: Explaining Economic Policy*. MIT Press.
- Posner, R. A. (1987). Regulation of the market in adoptions. *BUL Rev.*, 67:59.
- Posner, R. A. (1989). Ethics and economics of enforcing contracts of surrogate motherhood. *Journal of Contemporary Health Law and Policy*, 5:21.
- Posner, R. A. (1994). *Sex and Reason*. Harvard University Press.
- Posner, R. A. (2007). *Economic Analysis of Law*. Aspen Publishers, 7th edition.
- Ramello, G. B. (2012). Aggregate litigation and regulatory innovation: Another view of judicial efficiency. *International Review of Law and Economics*, 32(1):63–71.
- Rossmann, G. (2014). Obfuscatory relational work and disreputable exchange. *Sociological Theory*, 32(1):43–63.
- Rothman, B. K. (1988). Motherhood: Beyond patriarchy. *Nova L. Rev.*, 13:481.
- Sarasvathy, S. D. (2003). Entrepreneurship as a science of the artificial. *Journal of Economic Psychology*, 24(2):203–220.
- Sarasvathy, S. D. (2008). *Effectuation: Elements of entrepreneurial expertise*. Edward Elgar, Cheltenham, UK; Northampton, MA.
- Schumpeter, J. A. (1912). *Theorie der wirtschaftlichen Entwicklung: Eine Untersuchung über Unternehmergewinn, Kapital, Kredit, Zins und den Konjunkturzyklus*. Duncker & Humblot, Berlin.
- Schumpeter, J. A. (1934). *The Theory of Economic Development. An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle*. Harvard University Press, Cambridge.
- Schumpeter, J. A. (1942). *Capitalism, Socialism, and Democracy*. Unwin, London.

- Schumpeter, J. A. (2002). The economy as a whole (Theorie der Wirtschaftlichen Entwicklung, 1912 [english translation by U. Backhaus]). *Industry & Innovation*, 9(1-2):93–145.
- Shane, S. A. (2003). *A general theory of entrepreneurship: The individual-opportunity nexus*. Edward Elgar Publishing.
- Smith, G. P. (1968). Through a test tube darkly: Artificial insemination and the law. *Michigan Law Review*, 67(1):127–150.
- Snyder, S. and Byrn, M. (2006). The use of prebirth parentage orders in surrogacy proceedings. SSRN Scholarly Paper ID 889073, Social Science Research Network, Rochester, NY.
- Spivack, C. (2010). The law of surrogate motherhood in the united states. *American Journal of Comparative Law*, 58:97–114.
- Swedberg, R. (2002). The economic sociology of capitalism Weber and Schumpeter. *Journal of Classical Sociology*, 2(3):227–255.
- Utian, W. H., Sheean, L. A., Goldfarb, J. M., and Kiwi, R. (1985). Successful pregnancy after in vitro fertilization and embryo transfer from an infertile woman to a surrogate. *New England Journal of Medicine*, 313(21):1351–1352.
- Vanberg, V. J. (2014). Darwinian paradigm, cultural evolution and human purposes: on F.A. Hayek's evolutionary view of the market. *Journal of Evolutionary Economics*, 24(1):35–57.
- Wadlington, W. (1969). Artificial insemination: The dangers of a poorly kept secret. *Nw. UL Rev.*, 64:777.
- Wadlington, W. (1983). Artificial conception: The challenge for family law. *Virginia Law Review*, 69(3):465–514.
- Wagner, R. E. (2010). *Mind, Society, and Human Action: Time and Knowledge in a Theory of Social Economy*. Routledge.
- Wagner, W. J. (1990). The contractual reallocation of procreative resources and parental rights: The natural endowment critique. *Case W. Res. L. Rev.*, 41:1.
- Witt, U. (2002). How evolutionary is Schumpeter's theory of economic development? *Industry and Innovation*, 9(1-2):7–22.
- Witt, U. (2008). What is specific about evolutionary economics? *Journal of Evolutionary Economics*, 18(5):547–575.

Wohlgemuth, M. (2000). Political entrepreneurship and bidding for political monopoly. *Journal of Evolutionary Economics*, 10(3):273–295.

Wohlgemuth, M. (2002). Evolutionary approaches to politics. *Kyklos*, 55(2):223–246.

Wohlgemuth, M. (2005). Schumpeterian political economy and downsian public choice: Alternative economic theories of democracy. In Marciano, A. and Josselin, J. M., editors, *Law and the State: A political economy approach*, New horizons in Law and Economics. Edward Elgar Cheltenham.