Yoram Barzel:

Property Rights, Political Economy, and the Reorganization of Economic Analysis

By Rosolino A. Candela¹

It is a distinct privilege, yet one taken with deep regret, to honor the economist Yoram Barzel, who died on December 22, 2022. His impact as both teacher and scholar has been felt by the generations of students who have learned from his work, including myself. Perhaps more importantly, Barzel's greatest academic legacy has been the graduate students that he mentored, who have carried on his legacy as a seminal figure in the development of the "University of Washington approach" to economic theorizing.²

As noted in his *Seattle Times* obituary, Barzel was a central architect of the economics of property rights. To this I will add as the central focus of this memorial note, that by developing transaction-cost economics and incorporating it back into political economy, he was a seminal figure in the revival of price theory, properly understood. So important were his contributions to economic science, particularly in the field of new institutional economics, that the Society for Institutional and Organizational Economics awarded Barzel with the 2017 Elinor Ostrom Lifetime Achievement Award. To understand why his contributions were so important, we must first place Barzel in the intellectual context within which he began his academic career.

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² For a series of testimonials that demonstrate the love and respect of his students, colleagues, and friends, see https://dinabarzel.com/yoram-barzel.

Born December 9, 1931, in Jerusalem, Barzel began studying economics because of his interest in political economy, an important point to which I return later. When Barzel enrolled at Hebrew University in 1950 no such courses were offered. Instead, he settled on studying "plain economics" (Barzel 1995, xi), but among his teachers at Hebrew University were Don Patinkin and Abba Lerner. After completing his BA (1953) and MA (1956), Barzel enrolled at the University of Chicago in 1957, where he completed his PhD under Arnold Harberger in 1961. Upon graduation, Barzel joined the faculty of the Department of Economics at the University of Washington in Seattle, where he would spend the entirety of his career.

By the time that Barzel began his career at the University of Washington, the model of general competitive equilibrium, as developed by the economist Léon Walras, had moved into the foreground of economic analysis. As a result, economists had become increasingly preoccupied with proving the existence, stability, and uniqueness of equilibrium as "a reasonably accurate description of reality" (Arrow and Debreu 1954, 265). This would later give rise to the theory of market failure (Bator 1958) to characterize real-world market conditions that deviate from the conditions of competitive equilibrium.

As a master price theorist, Barzel was able to understand the detour that mid-twentieth-century economics had taken by distinguishing between a "Walrasian" approach to microeconomic theorizing and a "property-rights approach" to microeconomic theorizing, and the implications that follow from both in terms of illuminating the real world (Barzel 1985, 1989). According to this Walrasian approach, one in which there are zero transaction costs—defined by Barzel as "the costs associated with the transfer, capture, and protection of rights" ([1989] 1997, 4)—individuals

³ Why, then, are transaction costs not just costs, as Barzel (1985) asked? Because under the Walrasian approach, only the costs of production are required to transform inputs into consumable outputs. Transaction costs, however, refer to the costs of *organizing* production. Thus, *transformation* costs are distinct from *transaction* costs. A

are able to instantly exchange goods and services at a moment in space where buyers and sellers have full information regarding the attributes of the good they want to buy, and know the market-clearing prices of sellers. Hence, prices are a *sufficient condition* for an efficient allocation of resources, for within that model, "prices determine everything" (128). Individual agents make no genuine choice: they respond passively given the constraints that they face, much like animals responding instinctively to stimuli. In such a theoretical world, "institutions are superfluous; property rights, firms, tribes, or families cannot enhance efficiency" (11).

However, according to the property-rights approach outlined by Barzel, relative prices are *necessary, but not a sufficient condition* for generating an efficient allocation of goods and services (12). Property rights, according to Barzel, refers to the individual's ability, in expected terms, to consume a good, or the service of an asset, directly or to consume it indirectly through exchange (3). All social interaction can be understood in terms of the de facto property rights, or "economic rights," as Barzel refers to them, that individuals are able to exercise.

By incorporating the role that property rights play in the allocation of resources, Barzel was also able to illustrate how changes in property-rights arrangements are driven by various margins of adjustment, in terms of both price competition and "non-price-allocation methods with corresponding organizations," generated by rationally creative actors in both market and nonmarket settings (11). Such competitive activity is what drives relative price *formation toward efficiency*, rather than prices *determining an optimal outcome* by a Walrasian auctioneer. This is because the "Walrasian costs of production cannot be lowered by changes in social institutions,"

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production cost does not imply a dissipation of wealth in the transfer of resources between buyers and sellers, whereas transaction costs imply a dissipation of wealth because "maximizing individuals spend resources to capture valued attributes from each other. Total income then is less than it would have been under joint maximization" (1985, 13).

whereas the costs associated with those of transacting may be lowered by such institutions" (Barzel 1985, 13; emphasis added).

In developing the property rights-approach to microeconomic theorizing, Barzel was able to explain the basis for the formation of a variety of institutional arrangements and their change over time, such as the economics of slavery and manumission (1977), tying arrangements (1981), the economic organization of firms (1987a, b), the rise and fall Jewish medieval lending (1992), and the economic origins of medieval parliaments, democracy, and the rule of law (Barzel 1997, 2000, 2002; Kiser and Barzel 1991; Barzel and Kiser 1997, 2022). All of these phenomena are predicated on the simple, yet powerful, theoretical framework that defines the "University of Washington approach" of which he was a central architect, understood as follows: *in a world of positive transaction costs, individuals will devise institutional arrangements, both formal and informal, to realize the gains from trade by minimizing rent dissipation*.

The realization of gains from trade and the minimization of rent dissipation in the process of exchange are reciprocals of each other. The effects of price controls illustrate not only this last point, but also where the Walrasian approach differs most from the property-rights approach. In effect, not only do price controls constitute an assignment of property rights but also a reassignment of the exchange value of gasoline to the sellers up to the control price (Barzel [1989] 1997, 26); the remaining value is placed in what Barzel refers to as the "public domain," meaning that when property rights over a resource are not well defined, then the resources needed to acquire it accrue to no one, leading to rent dissipation. When price competition between buyers and sellers becomes restricted, nonprice competition becomes more prominent. However, since queuing for gasoline in the "public domain" reflects a higher real price but benefits no one, tie-in sales will emerge as a form of nonprice competition that both maximizes the potential gains from trade and

minimizes rent dissipation. By tying the sale of gasoline to other goods and services, such as lubrication, for customers who want to avoid idly waiting, cars become more lubricated during the period of gas shortages than before or after that period. Thus, tie-in sales were a response to monetize the transaction costs associated with rent dissipation in queueing.

Yet, Barzel's distinct contribution to this University of Washington tradition of property rights and transaction-cost analysis was his analysis of the relationship between measurement cost and economic organization (Barzel 1982). According to Barzel, exchange entails not only the costs of transforming inputs into valuable outputs, but also the costs of quantifying information into the price of a good or service being exchanged (1982). Hence, all production and exchange entails a *measurement problem*. When buyers purchase a good or service from a seller, they are purchasing a stream of valuable services on various margins that are consumed in the future, the attributes of which cannot be easily "priced" into an exchange at the time of the transaction.

Since pricing a good or service entails a measurement problem associated with discovering the value of its various attributes, nonprice competition emerges to facilitate market pricing. For example, when consumers are buying automobiles, what they are in fact purchasing is an assessment of how long the car will last, the likelihood and expected cost of future repairs, the expected depreciation in resale value, etc. "The greater the variability of the measurement around the true value, the lesser the information about the commodity," according to Barzel, explaining why individuals tend to haggle and negotiate car prices to a greater extent than the prices of refrigerators (1982, 28).

Moreover, Barzel's framework also illustrates that what appears to be a "market failure" due to measurement costs can generate profit opportunities for individuals by reducing measurement costs via institutional innovation. According to Akerlof (1970), asymmetric

information (or a "measurement problem," as Barzel would refer to it) between buyers and sellers in used car markets demonstrates how a "market failure" can arise to due asymmetric information. Without stating so explicitly, Akerlof's argument is based on the premise that prices are analogous to a public good, in the sense of providing information that is nonrivalrous and nonexcludable. As with any public good, the claim is that private markets will underprovide such a good due to free riding. According to Akerlof, "good cars and bad cars must still sell at the same price—since it is impossible for a buyer to tell the difference between a good car and a bad car" (1970, 489; emphasis added). Thus, if there is uncertainty over the quality of cars, but buyers can't distinguish good cars from bad cars (or "lemons") based solely on price, then according to Gresham's law, the "bad" cars tend to drive out the good cars.

Although Akerlof discusses the role of "counteracting institutions" such as guarantees (i.e., product warranties, as Barzel refers to them) or brand names to mitigate asymmetric information, Barzel's analysis clarifies the role that warranties and brand names play in the pricing process. As Barzel argues, "When we discover such discrepancies," however, the task of economic analysis "is to determine how resource allocation will change when the costs and benefits from *reducing such discrepancies* change" (Barzel [1989] 1997, 39; emphasis added). Whereas Akerlof would regard asymmetric information problems as a defect of the market process, for Barzel, measurement problems are a very feature of why markets exist. Product warranties or brand names are not a suboptimal solution for realization of Walrasian equilibrium; given that measurement costs always exist, they facilitate market pricing by preventing further dissipation of the gains from trade due to excessive measurement. Such excessive measurement is curbed by concentrating the costs of bad quality on the seller. As Barzel states, by "backing the quality of the item with a brand name, a bad item sold under the name will tarnish the entire brand. The more likely the customer

is to encounter the brand in the future, the more severe the penalty he can impose on the seller and thus the less he has to worry about being cheated" (1982, 37).

The explanatory power of Barzel's work on measurement costs not only sheds new light on old problems in economics, such as the role that warranties play to reduce the measurement costs associated with asymmetric information, but also highlights the creativity that human beings have exhibited in devising organizational arrangements to realize the gains from trade and to minimize dissipation that could result from excessive measurement. For example, what explains the contract choice between actors and a studio prior to creating a new movie? Or, what explains the way barbershops are organized around share contracts rather than arrangements in which the salon owners pay wages directly to the barbers they employ?⁴

To address these questions, Barzel notes that Ronald Coase pointed out "two forces favoring organizing production": the first is "the cost of 'discovering what the relevant prices are'; the other is "the costs of negotiating and concluding a separate contract for each exchange transaction which takes place on a market." However, Barzel suggests that there is third force driving economic organization: "the cost of measuring intermediate outputs" (Barzel 1982, 41, n. 30). The key to answering both questions can be found in the following statement by Barzel: "Because of the difficulty in predicting the ultimate success of the venture, the determination of the appropriate lump sum is expensive to reach" (34). Therefore, "if the party that will be more inclined to affect the outcome by varying the level of an attribute is put in control of that attribute,

⁴ I have selected this example for two reasons. First, Barzel uses the organization of barbershops as a particular example in his work (see Barzel 1987a, 112). Second, I am fortunate to have particular knowledge of this particular example, thanks to my father, Gaetano Candela, who himself has been both a salon owner and an employed barber by other shops.

thereby becoming the residual claimant of its variability, losses will be minimized" ([1989] 1997, 47–48).

Take for example the contract struck by the studio that filmed the 1988 movie *Twins*, costarring Arnold Schwarzenegger (with Danny DeVito). Although Schwarzenegger had already become an action superstar by the mid-1980s, his attributes as a *comedic* superstar remained highly uncertain at the time. Given the difficulty of the studio to "measure" and predict the value of Schwarzenegger's "input" into the production of a comedy, he took no salary for his labor services as an actor, thereby minimizing potential losses to the studio. Instead, he structured his contract with the studio in a manner that would assign him a share of any eventual profits, the returns from which exceeded the salary he received from any other movie.

In the case of the organization of barbershops, the nature of the service being sold explains why many barbershops are structured in terms of share contracts. The nature of a haircut, shave, or grooming is not homogenous, but heterogenous according to each client, requiring particularized knowledge of the attributes desired by the client. This includes what conversations to have, and perhaps more importantly, what conversations *not* to have. Measuring the value of a barber's ability to discover these attributes across particular clients, and therefore attract clients to the barbershop, is far higher for the owner of the salon than for the individual barber employed at the salon. Therefore, "the greater the difficulty in measuring one factor's contribution vis-à-vis that of others, the more likely is the owner of that factor to assume the position of the residual claimant" (Barzel 1987a, 105). Whereas the owner of the salon is rewarded a share of profits for "self-policing" his ownership of the physical capital generally used in the salon by the other barbers, the individual barbers are rewarded a share of the salon's profits by "self-policing" their own asset-specific human capital.

One of the great ironies in drawing a distinction between the Walrasian approach and the property-rights approach, according to Barzel, is that whereas the Walrasian paradigm had been used as the theoretical basis for the model of market socialism and its superiority over capitalist economies, the property-rights approach—developed to illustrate how capitalist economies work—is "most powerful when [it is] used to analyze non-market—including socialist—economies" ([1989] 1997, 128–29), specifically to explain how the de jure abolition of private property under socialism became a political guise for the de facto monetization of control rights over goods and services in the black market (see Boettke 2020).

The property-rights approach thus has important theoretical applications that extend beyond the relationship between property rights and relative pricing for resource allocation. It also explains that property rights guide the choice between using the price mechanism and the non-price-allocation mechanisms. As I mentioned at the beginning, although Barzel's initial interests in economics arose from questions in political economy, such interests were revived by Barzel's work with Tim Sass on the constitutional structure of condominium homeowners' associations (Barzel and Sass 1990). In the course of this project, Barzel developed a property-rights approach to understanding the evolution of the state (2000; 2002) and the origins of democracy and the rule of law (Kiser and Barzel 1991; Barzel 1997; Barzel and Kiser 1997, 2002). "This body of work," Barzel states, has been "difficult to 'sell'" (1995, xxiii). However, because this work is so important in terms of its implications for understanding not only institutional change but also political and economic development, it is perhaps his most underrated and fruitful for potential research.

Although private property rights are necessary to understand the nature and causes of the wealth of nations, they are not sufficient, according to Barzel. "To better understand the

development of the rule of law and democracy in the West," and therefore the political origins of economic development, "it is necessary to go back to its medieval origins" (Kiser and Barzel 1991, 396). Barzel provides a theoretical framework for understanding how the rule of law can gradually emerge from an initially authoritarian political environment, such as was the case after the Norman conquest of England in 1066 (Kiser and Barzel 1991), which unintendedly created the political basis for secure property rights.

The basis for this process is rooted in the self-interest of the ruler, who faces a trade-off between personal wealth and security. Consistent with this trade-off, a ruler who has secured the conquest of a particular territory and its subjects will relax the imposition of restrictions that limit the subjects' ability to accumulate wealth (Barzel 2000, 32; Kiser and Barzel 1991, 399). By securing the legal right to contract and trade resources between a ruler's subjects to facilitate productive specialization and exchange, the ruler increases the wealth base from which to tax the subjects.

Such wealth accumulation, however, is dependent on residual claimancy, such that subjects can reliably expect to exploit their variability in output, and that the ruler can reliably expect to bear the cost of collective action triggered by the threat of confiscation. This implies, however, a credible commitment on the part of the ruler to enforce property rights and not confiscate wealth. However, if a ruler feels secure from potential overthrow from their subjects, then they will tend to allow their subjects to trade and accumulate wealth without feeling threatened. Therefore, political institutions such as parliament emerge as a means through which rulers can credibly commit to securing the property rights of their subjects by exchanging voting rights over taxation. A secure ruler will allow a parliament to meet regularly in order to serve as a collective-action

mechanism that constrains the ability to confiscate the wealth of the subjects. This process constitutes an evolution toward the rule of law.

Barzel's contributions to political economy illustrate an important implication regarding economic development that ties back to the overall body of his voluminous scholarship: property rights may guide the internalization of externalities (Demsetz 1967), but the emergence of property rights is contingent on a political-exchange process that must first internalize another negative externality: namely, the costs of violent conflict itself (such costs being the forgone opportunity to engage in productive specialization and exchange). Stated another way, rules must emerge to minimize rent dissipation from the use of violence before social order can emerge.

Barzel's intellectual career provides, particularly to the young enterprising economist, an example of an individual who embodies the best of what an economist should be in three particular ways. First, he was a lifelong learner who marveled at the mundane and therefore was able to illustrate the creative powers of individuals when free to craft and learn in order to improve institutional arrangements that facilitate cooperation without command. Second, he demonstrated through his scholarship that taking joy in marveling at the mundane must not come at the expense of understanding fundamental questions about the nature and causes of social order. Third, he showed that the best practice of economic theorizing marries property-rights economics, transaction-cost economics, public choice, and market-process economics as complementary approaches into a single theory of human action.

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