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“A note on John Heskett’s economics” for *Design and the Creation of Value* edited
by Clive Dilnot

On the book

I would like to thank Clive Dilnot for asking me to review the economics of John Heskett as found in the draft manuscript of this book in the fall of 2015. I was asked to review the economic theories and ideas in the book to see if there is anything which might appear glaringly wrong to a historian of economic thought (the short answer here is, no, I did not find anything amiss, except for the absence of specific mention of J.M. Keynes, Keynes being of course the most influential economist of the 20th century – and with the bailouts and unprecedented monetary easing after the financial crisis of 2007/8 – the 21st century so far as well, more on this below).

I knew intuitively after reading the first chapters that I would enjoy what John Heskett had to say. Like Heskett I am also interested in a critique of the development of mainstream economics from the early modern ‘classicals’ through today. Today’s orthodox economic thought cannot explain the phenomenal economic growth of the 19th and 20th centuries¹. Further, neoclassical (Keynesian) macroeconomic scientism reduces human economic interaction to behaviour predicated upon a monopoly central bank-influenced interest rate (and/or a government spend-out rate), while at the same time transferring to central bankers the symbolic wisdom of the Oracle on Delphi². This central bank aggrandizement

¹ See J. Bradford DeLong (2000). “Cornucopia: The Pace of Economic Growth in the Twentieth Century”, NBER Working Paper No. 7602 (available on the internet) for a study on economic growth in historical perspective.

² For example, Neil Irwin (2015). “Why Yellen Blinked on Interest Rates”, *New York Times*, September 17.

is something I find discouraging as a student of the Scottish Enlightenment and the enlightenment's philosophical systems against excessive centralized power. Nor can most orthodox economics explain the relative economic stagnation since the Great Recession after the financial crisis. Thus I knew Heskett on to something with his concisely critical and methodological approach, starting with neoclassical economics and building outward towards a synthesis (and critique) of economic thought as developed over time through today's growth theory.

My belief is that it is the Austrian school of economics use of the "entrepreneur" as change agent in the economy which can best describe human economic value-creation (see Chapter 3 on Austrian economic theory). It is human action and a social structure which encourages entrepreneurial risk-taking and profit-seeking which can explain growth; not aggregated and historical quantities of capital and labor in neoclassical equilibrium and other aggregates such as levels of education or the number of patents in a nation over time as found in orthodox growth theory. Mainstream economics mostly misses the need for economic freedom and a stable policy environment to encourage individual entrepreneurial action, in this we find that political economy is more robust than mainstream economics for understanding social-economic activity. Heskett includes a chapter on *The National System* to introduce the historically-derived policy environment, Adam Smith's book was of course the *Wealth of Nations* (1776).

Entrepreneurs in free-market exchange create value, value which emerges no matter how measured by whom and when, as long as the rule of law allows this flourishing. Some might believe that profit-seeking is a form of social stigma. We might also forget that profits are created by serving the needs and wants of others in freely-associating relationships through markets. (Profits, or rents, too can be made by seeking special treatment under law which prevents market competition, Heskett's works contain this thread in economic thought as well.³ For example we will see more on the case of the bankruptcy and bailout of General Motors during the Great Recession in 2009.)

I was inspired by Heskett's designer as change agent, something in-tune with today's visually-oriented and instant and 'sharing' new economy. The designer can be a modern industrialist-entrepreneur like Steve Jobs or Bill Gates. The designer

³ Anne O. Kruger (1974), "The Political Economy of the Rent-Seeking Society", *American Economic Review*, Vol. 64, No. 3, is the seminal piece on special interest rent-seeking. Pietra Rivoli (2005), *The Travels of a T-Shirt in the Global Economy: An Economist Examines the Markets, Power, and Politics of World Trade* (Hoboken: Wiley) is also filled with examples of producers seeking protection from markets in order to ascertain rents.

can be a founder of the many social media and sharing economy firms emerged over the last number of years (concurrent with the equity bubble abetted by central banks' unprecedented use of monetary easing since the financial crisis of 2007/8). The designer can be within a firm as an employee or executive, or an outside consultant engaged under contract to provide strategic leadership which may be lacking due to organizational stasis. The point is that the designer might be seen as form of the Austrian school entrepreneur (and with this book Heskett contributes to the economic theory of the firm by assigning designers within a firm an important part in turning tacit knowledge into value-creation through artifact – both physical and digital - realization).

Heskett's book herewith is a good example of interdisciplinary knowledge, and he synthesizes three major fields; the history of economic theory, design as practice, and firm strategic management. You can tell that Heskett is a careful and caring educator of designers and is rightfully considered a pioneer in relating how design can create value in our lives.⁴ Heskett notes firm profits derive from creating *exchange-value* but that the purpose of design as well is to create *use-value*, through originality and creativity and in continuous feedback with the users of a firm's products and services, between a firm's *designs* and its network of users.

As I was going through the manuscript I found myself doing a running commentary on what Heskett was writing (mostly) in the late 1990s and then as applicable in hindsight to today's economy and today's economic thought and practice. I found John Heskett's story of the development of economic thought refreshing and the synthesis convincing. These ideas are well-illustrated by the 'flow charts' in the chapters on each school of economic thought and especially so in the concluding chapter's synthesis of economics, design and the firm.

After submitting my comments Professor Dilnot then asked that I help put together chapter readings for those interested in further related studies in economics and help to choose those of Heskett's illustrations which best reflect the main economic points of the book. I was then asked later in the project to write this note. What follows is my commentary directed towards specific categories and related to ideas I found especially compelling in the Heskett manuscript and which I hope might clarify and give context to some of the economic ideas in the book. And as requested by Clive Dilnot I also try to tie-in when applicable specific examples of Heskett's thoughts on the importance of design in value-creation and concepts of value in society generally.

⁴ Penny Spark (2014). "John Heskett obituary," *The Guardian*, March 12.

On neoclassical economics

As mentioned what is missing from the draft *Design and the Creation of Value* is mention of John Maynard Keynes (1883-1946). Keynes' treatise, written during the Great Depression⁵, was the founding document of 'macroeconomics' as a subfield in economics and which assigns an activist role to central banks and governments to counter the downward portion of a business cycle and the unemployment created during this economic contraction. The Keynesian revolution has led to through today what is known as the "neoclassical synthesis" where free-market microeconomics – the subject of Heskett's chapter on neoclassical economics - is applied to the short-term and activist Keynesian macroeconomics to the long-term.⁶ (There is no consensus as to what exactly constitutes these periods of time, giving discretion to policy-makers in Delphi to determine these periods in activist policy applications which can include rent-seeking.)

Heskett shows neoclassical supply and demand graphs in this chapter and criticizes the fact that neoclassical economics cannot explain how the suppliers and demanders enter the market (enter into the graph showing "perfect competition") in the first place. Mainstream economics assumes given and known and unchanging consumer preferences and assumes all products in a given market are the same and that all producers have the same production costs, technologies and knowledge (in other words, there are no "transactions costs", it is this assumption which is addressed by new institutional economics as found in Chapter 4). In neoclassical economics firms price according to the cost of production (as opposed to more realistically pricing at what the market will bear) and the costs of production have decreasing returns to scale above a certain quantity of production.⁷ This neoclassical model of course cannot explain new and better products and cheaper prices under market competition nor economic growth over the long-term. It is

⁵ J.M. Keynes ([1936]). *The General Theory of Employment, Interest and Money*, many editions available on the internet.

⁶ I thank Johann Jaeckel for his insight that a discussion of Keynes is necessary for a book on the history of economics and as well for his help in improving my understanding of growth theory.

⁷ These firm production costs and assumptions are known as "Marshallian cost curves", developed in the late 19th century under a completely different economic structure of production from today. See Alfred Marshall ([1890] and later editions), *Principles of Economics*, many versions available on the internet. These cost curves then later become the foundation of the "production function" under Milton Friedman's (and others) positivist economics, Milton Friedman (1953), *Essays in Positive Economics*, Chicago: University of Chicago Press.

these weaknesses in neoclassical economics that Heskett addresses in subsequent chapters.

This brings us to one of the major dualities in economic theory as developed in the 20th century through today; that of the use of mathematics in positivist economics. Along with the development of statistics in the 1930s came mathematical models to use these statistics as a basis for improving the economy (the end result being the afore-mentioned Oracle[s] of Delphi). It is the use of these statistical aggregates in mathematical economics which has become mainstream economics today, as witnessed by both neoclassical economics and, later, new growth theory.⁸

Heskett notes that Edward Chamberlin's *The Theory of Monopolistic Competition* [1933] introduces differentiated products and addresses weaknesses in "perfect competition" but Chamberlin's ideas did not catch on with "mathy" mainstream economists. Product differentiation means that quantities of inputs and outputs cannot be aggregated and integrated into mathematical models as can Keynesian models and new growth theory models. With this math-based approach comes the power and prestige of the guild, where the economist is a mechanic whose tool kit can fine-tune to economy and therefore improve people's lives.⁹

On growth theory

John Heskett is writing about new growth theory in the late 1990s and the early 2000s, the most recent citation for this chapter is 2003, and it is now early 2016. What follows is to present a view of growth theory as an intellectual enterprise which illustrates how John Heskett's use of the category "Growth Theory Plus +" in the book is not overcome by events and which might be helpful towards capturing an accurate picture of the field of growth theory today.

New Growth Theory came into its own as a field in part as a reaction to Robert Solow's 1957 paper in the *Review of Economics and Statistics*.¹⁰ Solow examined

⁸ See Philip Mirowski (1991), *More Heat than Light: Economics as Social Physics, Physics as Nature's Economics*, Cambridge: Cambridge University Press, for the development of mathematical formalism in economics based on Newtonian physics.

⁹ The Full Employment Act of 1946 created the Council of Economic Advisors in the US President's office and assigns an activist role to federal fiscal policy for employment-creation based on the now dominant Keynesian macroeconomics.

¹⁰ Robert Solow (1957). "Technical change and the aggregate production function". *Review of Economics and Statistics* 39 (3): 312–320.

economic growth in the United States from 1909 to 1949 by using a model whose inputs are quantities of capital stock, labor hours and “technical change”, where technical change is defined as “any kind of shift” to productivity that is not explained by capital and labor inputs. Solow found that labor productivity in the US economy doubled over the period and that only 12½ % of this productivity improvement is due to increased capital investment. The remaining 87½ % of productivity growth comes from the ill-defined “technical change”. This result illustrates how static neoclassical models miss the increasing returns to scale needed to explain exponential historical levels of economic growth.

The unexplained increase in labor productivity (the unexplained historical economic growth) has become known as “Solow’s residual” (or, *the measure of economists’ ignorance* which Heskett refers to in the text) and is what economic growth theorists have been trying to explain by proxying for ‘technical change’ (increasing returns to scale) in their models, this methodological trend continues through today, after Heskett has finished his research of growth theory for *Design and the Creation of Value*.

Solow’s model (his aggregated production function) uses technical change as an exogenous variable, where technical change is measured (defined) by what is not explained by the endogenous variables capital and labor. Growth theory now treats “technical change” as endogenous, as something which interacts with labor and capital to create economic value, something internalized to the mathematical economist’s model, not something unexplained by it. The endogenous growth theory research program is a subset of or an outgrowth from or an advance in new growth theory.

Explaining technical change is what Paul Romer calls the “economics of ideas” and who highlights the importance of human capital formation for economic growth.¹¹ A key step in the development of growth theory is Kenneth Arrow’s concept of “learning by doing”¹² which John Heskett in this book says needs to be made manifest as transferable knowledge in order to create value. The Austrian school of economics believes that it is the *entrepreneur* who creates economic value through risk-taking and profit-creation (value creation absent political rents). John Heskett as well sees a role for the *designer* in this endogenous value creation

¹¹ For more on growth theory see Marin Muzhani (2014), *Mainstream Growth Economists and Capital Theorists: A Survey*. Montreal and Kingston: McGill-Queen’s University Press and David Romer (2011), *Advanced Macroeconomics*, 4th Edition. NY: McGraw-Hill Irwin.

¹² Kenneth Arrow (1962). “The Economic Implications of Learning by Doing”. *Review of Economic Studies* 29 (3): 155-173.

and insists that design be incorporated in the very highest level of a firm's strategic management (in the Appendix Heskett uses the case of Donald Heskey [1894-1989] as a prototype of the industrial designer - entrepreneur, who engages within and between design communities, business communities, and the public sphere for advocating the ability of design as practice to create value[s] in society).

In the final chapter of *Design and the Creation of Value* Heskett introduces his category of "Growth Theory Plus +". This category summates/synthesizes his interdisciplinary ideas about the role of the designer in firm long-term strategic management and how the designer's role in value creation relates to economic theory (here Heskett may concede too much interpretive and predictive robustness to mathematical growth theory as the ending synthesis of economic thought, though we cannot fault John Heskett for trying to engage the mainstream of the economics profession in this text, the purpose being to incorporate the designer within a business world whose MBAs are required to study this orthodox economic thought.)

In the synthesis of economics leading to growth theory we find most importantly (at the least for the present writer) the market-orientation of neoclassical economics, the transactions costs approach of new institutional economics, especially the tacit knowledge within a firm's strategy, production and management processes, socially-created demand found in old (or original) institutional economics and the acknowledgement of (perhaps unmeasurable) factors of production (imbedded knowledge, technology and institutions within society) which can lead to increasing returns to scale and as explored by growth theory.

Heskett then embeds a continuous firm and consumer feed-back loop derived from design-driven firm strategy into his growth theory model, giving us "Growth Theory Plus +". Heskett's synthesis is becoming more, not less, relevant after completing *Design and the Creation of Value* as witnessed by, for example, the ability of Uber and Airbnb to garner firm networks of users as political support against (or in actuality as a means of power to negotiate with) vested interests such as unions and taxing authorities who have the most to lose from the new economy of greatly reduced transactions costs and less visible sources of (taxable) value-creation due to the vast digital economy including social media and more recently digital money alternatives.

On Veblen, and the financial crisis of 2007-8

Thorstein Veblen (1857-1929) is one of the founders of American institutional economics and is best known for “conspicuous consumption” in the *Theory of the Leisure Class* (1899), a beloved and eccentric work of economic sociology, and for therefore introducing consumption preferences which can be socially-determined, as opposed to exogenously formed, into neoclassical theories of demand. Instead of Marx and Engels where the working class overthrows the rich in revolution, we have the not-rich wanting to be seen as living like the rich through visible life-style consumption choices.

Design and the Creation of Value introduces Veblen’s ideas into discussions on demand-creation (based on social structure in the field of institutional economics) and in relation to design as a force for value-creation rather than waste. For our purposes here we can use Heskett’s writings about Veblen (both in the present text and in Heskett’s Helsinki lectures (**dates?**), **I was unable to ascertain same**) when he was formulated the ideas contained in this book to help explain the financial crisis of 2007/8.

Heskett focuses on two of Veblen’s memes; 1) the “instinct of workmanship” and 2) the “pecuniary habit”. Instincts are normatively positive for the continuation and evolution of the species whereas habits are normatively negative and counter-productive. (Conspicuous consumption itself is seen by Veblen as frivolous and wasteful and therefore of course counter-productive towards industrial development.)

The financial crisis of 2007/8 was due to ‘financialization’ of the economy, which is related to Veblen’s pecuniary habit, in this case policy (an institution which then becomes/forms a social norm) that encourages debt over ownership. Workmanship is normatively positive because craft (practice) leads to refined industrial output. The pecuniary habit (financial returns in the market) is normatively negative as this behaviour does not lead to real economic productivity (and today mostly only generates fees for financial counter-parties creating more debt).

Heskett further describes the difference between Veblen’s concepts of ‘instinct’ and ‘tropismatic action’. Tropismatic action is an unthinking response to stimuli (in our case policy incentives) whereas action based on instinct is derived through reason.

This distinction can help explain the 2007/8 financial crisis. The central bank has been encouraging low rates of interest for several years after the dot.com crash of 2001. Also, beginning in 2000 the US Federal Housing Authority and the Federal

Reserve are encouraging that half the mortgage loans in the United States are to be 0% down-payment mortgages, and especially in districts which are deemed underdeveloped by the federal authorities (see the Community Reinvestment Act and relatedly “red-lining”).¹³ All this incentivizes unthinking investment in (unaffordable) housing and is combined with and influenced by negative incentives for accurate bond-ratings due to regulatory capture (bonds are over-rated so therefore more bonds are purchased than had they been accurately rated).

Then Fannie Mae and Freddie Mac (US government-backed agencies) are guaranteeing (poorly-rated) mortgage-backed bonds (MBBs) at 100%. And, international banking standards (the Basel standards I, II, and III) encourage banks to hold these MBBs as reserves against which further lending can be made. This means that by the time of the crash of 2007/8 there were inflated housing prices (cheaper money means more long-term investment, e.g. mortgages and MBBs than had there not been central bank interest rate manipulation) and the MBBs were more than double the value of the actual underlying mortgages (not least because MBBs are a world-wide phenomenon due to the Basel banking standards and the dominance of the US\$, and US Treasury debt, in the world economy).

Incentives for debt creation (including the ability to write-off debt interest payments pre-tax on the US income tax code) help to create Veblen’s pecuniary habit to the detriment of workmanship (design is workmanship). We see these pecuniary habits take form as the central bank(s) keep near zero rates of interest (for the US Fed from 2007 until late 2015) for unprecedented lengths of time. This “easy money” is evident in the valuation of social media firms at billions of dollars in IPO capitalizations, many without making a profit, or a small profit for not too long of a time. We also see this with the huge volume of mergers and acquisitions also occurring concurrently with easy money and tax code incentives for debt-creation.

It is not a failure to innovate which creates the financial crisis, there are lots of incentives to innovate in financial derivatives (the *pecuniary*), but as Heskett describes in the text, there are less incentives to innovate in *workmanship* (real goods and services adding new value). The financialization of the economy (and subsequent crises caused in part by central bank interest rate manipulations) is due to policy which encourages the pecuniary habit over the instinct of workmanship.

¹³ Jeffrey Friedman (2009). “A Crises of Politics, Not Economics: Complexity, Ignorance, and Policy Failure”, *Critical Review* 21 (2-3): 127-184, and the accompanying volume edited by Friedman is a good source for differing though often complimentary views on the causes of the financial crisis of 2007/8.

This policy-based social structure represents ill-shaped social values towards financialization and away from craft and quality.

John Heskett criticizes business schools for focusing on the pecuniary rather than on workmanship. Veblen calls the modern (post-1913 central banking and income tax-created) corporate structure “absentee ownership”. Because of financialization modern firms are much more debt capitalized than equity capitalized (thus making the economy much more vulnerable to interest rate manipulations by a central bank). With this financialization develops a management class, whose best interests are themselves not the equity owners of a firm (the latter being such a small percentage of the capitalization that the owners are “absent”). However we cannot necessarily fault the business schools nor the business executives, it is habit created by and reacting to policy incentives which creates financialization, policies in place long before this and several previous generations of business school graduates.

On the bankruptcy of General Motors, and its bailout during the Great Recession

John Heskett has taken an interest in the US automobile industry from the 1960s onward, as an example of the failure of industry to consistently adapt corporate strategies toward user-oriented design (as do for example Japanese motor companies), instead and as reiterating an “arrogant” producer-oriented design strategy in the United States.¹⁴ Specifically we find in retrospect that GM provides a good case study for illustrating the thesis in *Design and the Creation of Value* arguing for the necessity of design in high-level strategy and not just as a shallow afterthought towards product differentiation, a dichotomy of thought Heskett labels “design” versus “styling”.

In our discussion above on Veblen we find design as workmanship can create new value whereas the pecuniary instinct prioritizes financialization and paper profits for a self-interested management class over the creation of value for both the firm and the consumer. This management class loses touch with the need to serve the wishes and needs of the end user (and as we shall see then can resort to rent-

¹⁴ The analysis and commentary in this section comes from the *Design and the Creation of Value* manuscript (the chapter on institution economics and the Appendix on the rise and decline of design-oriented firm management in the U.S.) and from John Heskett’s “GM’s current woes reveal the price of corporate arrogance and amnesia” (originally published by *I.D. Industrial Design*, May/June, 1992, 38-40, and collected in *Design History Economics: A John Heskett Reader*, edited and with an introduction by Clive Dilnot, **final cite...**).

seeking to minimize the negative effects on profits this self-imposed lack of competitiveness).

John Heskett describes how US business models may orient towards management-by-metrics and financial engineering (whereas design value-added regrettably is not easily quantifiable and can be relegated to the marketing department alone) which furthers the pecuniary over a user-oriented design strategy (Heskett also attributes US industry arrogance to the dominant position in world markets obtained as a result of the second world war). In our case this means that US car firms lose market share to foreign competition, and therefore seek rents in the form of tariff and non-tariff trade barriers against more innovative and efficient foreign manufacturers. This under the guise of economic nationalism, prioritizing domestic producers (some people) over domestic consumers (most everyone) as is the usual pattern in international trade treaties, whether WTO, bilateral or regional-multilateral.¹⁵

In the chapter on *Institutional Theory* we learn of Nobel Laureate Oliver E. Williamson's 'transaction cost economics', though without an exploration of the downside of Williamson's "asset specificity". Like Ronald Coase, Williamson critiques and improves-upon the neoclassical model of perfect competition. Asset specificity allows factors of production to be relative to a time and place and are therefore not perfectly substitutable in an aggregated production function as is assumed under most neoclassical (and growth theory) models.¹⁶ This asset specificity of local context can explain why the US government used discretionary power to nationalize and restructure General Motors in 2009 towards special interests as opposed to letting the markets and courts regulate GM's bankruptcy.

In the US automobile industry asset-specificity, and therefore barriers to perfect competition, include interventions by the United Auto Workers, industry lobbyists and members of congress who support trade protection (automobile labor and

¹⁵ Charles Beard in *An Economic Interpretation of the Constitution of the United States* [1913] finds that within just a few days of the first session of the newly-created U.S. House of Representatives (in April 1789) there were more than 25 special interest groups successful in seeking House trade protection against foreign competition.

¹⁶ A good pop culture example of asset specificity is the "skyscraper index" (see wiki) which describes how there is a critical mass of skyscraper starts at the peak of a business cycle and then how these buildings remain unfinished at the bust of the business cycle (due in part as described above by 'easy money' central bank policies which incentivize long-term investment like real estate over the shorter-term investments which would have been made absent interest rate intervention.)

industry groups are major donors to political campaigns therefore get state-supported monopoly rents in return¹⁷). The GM nationalization is an ideal-type example of corporatist asset-specificity, something we find as the necessary end result of Heskett's critique of GM's producer-oriented design manipulation as uncompetitive compared to that of a consumer-oriented corporate design strategy which can maintain firm competitiveness in the long-run.¹⁸

Reading John Heskett was of great value for me, his writing inspiring much insight into economic ideas of my own interest as shown above. I am sure that many of those with an interest in economic theory and students and teachers of design, economics and management will find the same result. The synthesis of disciplines offers new ways to understand entrepreneurship and relatedly to see afresh applied innovation as value-creation and realization in on-going exchange relationships. As such *Design and the Creation of Value* is an engaging text for those interested in the "new economy" while offering an innovative synthesis of disciplines by an experienced educator and a broad-based, and knowledgeable, industry professional and historian.

¹⁷ The GM bailouts were started by Republican President George W. Bush and continued, with ultimate nationalization, by Democrat President Barak Obama.

¹⁸ GM receives more than \$60 billion of appropriated funds during its restructuring, with 60% ownership going to the US Treasury, 19% to the United Auto Workers union, and with the remaining 21% in equity going to GM's creditors and Canadian governments; Chris Isidore (2009), "GM bankruptcy: End of an era. After years of losses, the troubled automaker is forced into bankruptcy. GM is set to close a dozen facilities and cut more than 20,000 jobs," *CNNMoney.com*, June 2.