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The instability of preferences: Uncertain futures and the incommensurable and intersubjective nature of value(s)

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The Instability of Preferences

Uncertain Futures and the Incommensurable
and Intersubjective Nature of Value(s)

Richard Bronk and Jens Beckert



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Abstract

The default assumption of standard economics is to treat preferences as exogenously 'given', consistent with one another, 'revealed' by past choices, and context independent. There has been increased interest recently (within behavioural economics) in the impact of inconsistent or irrational preferences and (more broadly) in dynamic and endogenous preferences. This paper builds on these challenges to standard assumptions by analysing the pivotal role of three aspects of preference formation in explaining capitalist dynamics and market instability. These are the constant creation of new preferences and the indeterminacy of choice sets in the context of widespread product innovation; the moral indeterminacy implied by conflicting and incommensurable social norms attaching to market goods where there is no single scale of value and hence no unique set of rational trade-offs; and, lastly, the contingent social and market construction of the product differentiation, quality attribution, and value assessments central to preference formation. The paper concludes by considering implications for economics as a discipline.

Keywords: endogenous preferences, incommensurable values, preference cascades, preference formation, product differentiation, quality uncertainty

Zusammenfassung

Eine Standardannahme in den Wirtschaftswissenschaften ist, dass Präferenzen exogen „gegeben“, konsistent, durch vorausgegangene Entscheidungen offenbart und kontextunabhängig sind. In Kreisen der Verhaltensökonomie ist neuerlich ein gesteigertes Interesse an den Auswirkungen widersprüchlicher oder irrationaler Präferenzen und – etwas weiter gefasst – an dynamischen und endogenen Präferenzen zu verzeichnen. Das vorliegende Papier geht von diesen Kritiken aus und untersucht die zentrale Rolle dreier Aspekte der Präferenzbildung zur Erklärung von kapitalistischer Dynamik und Marktinstabilität: 1) die konstante Schaffung neuer Präferenzen und die Unbestimmtheit von Auswahlkriterien angesichts einer großen Anzahl von Produktinnovationen; 2) die moralische Unbestimmtheit aufgrund sich entgegensehender und nicht vergleichbarer sozialer Normen, die mit Marktgütern in Zusammenhang gebracht werden, ohne das Vorhandensein einer allgemeingültigen Werteskala und somit ohne eine feste Auswahl an möglichen rationalen Ausgleichen; und 3) die ungewisse soziale und marktbezogene Zusammensetzung von Produktdifferenzierung, Qualitätszuschreibung und Wertbeimessung, die für die Präferenzbildung von zentraler Bedeutung sind. Das Papier schließt mit Überlegungen, welche Implikationen sich daraus für die Disziplin der Wirtschaftswissenschaften ergeben könnten.

Schlagwörter: endogene Präferenzen, inkommensurable Werte, Präferenzbildung, Präferenzkaskaden, Produktdifferenzierung, Qualitätsunsicherheit

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The Instability of Preferences: Uncertain Futures and the Incommensurable and Intersubjective Nature of Value(s)

1 Introduction

Orthodox economics has shown little interest in the nature and source of preferences (Hausman 2006) or in the role that the contingencies of preference formation play in the dynamics of capitalist systems. Far from preference formation being a focus of investigation, preferences are usually seen as exogenously determined (Aspers and Beckett 2011) and simply part of the parameter specification of economic models. Preferences are generally assumed to be 'given' tastes, expressed as ordinal rankings of different bundles of goods, and revealed in actual market choices; and they are assumed to be consistent with each other and to accord with certain axioms of rationality to ensure that models using these preferences can yield determinate results.

The definition of preferences as simply what is revealed by choice ensures that they can have no independent explanatory power in the analysis of behaviour in situations of structured choice; that is, the formal identification of the independent variable (preferences) with the dependent variable (choice) makes preferences causally uninteresting (Rothstein 1996). Economics accordingly fails, for the most part, to focus either on the source of agents' preferences or on the impact that changes in, and conflicts between, them have on outcomes. 'One of the most peculiar illusions of economists is a doctrine that might be called the Immaculate Conception of the Indifference Curve, that is, that tastes are simply given, and that we cannot inquire into the process by which they are formed' (Boulding 1969, 1–2).

By contrast, this paper argues that preferences – and their link with contingent evaluations of the quality of goods¹ traded – are key to understanding capitalist dynamics and the instability of markets. Preferences involve more than the comparative ranking of alternatives on the basis of relative quality assessment; they also engage our emotions of desire or aversion on the basis of deliberative reasons, imagined futures, identity-based narratives, symbolic value, and socially generated norms. As such, they are central to motivation and demand in the economy, as well as to rational choice in conditions of scarcity. This is important because – contrary to Say's law – demand is precarious and cannot be taken for granted, for reasons that are more general than those which famously concerned Keynes (1936). Economic growth cannot be guaranteed simply by the exhaustion of opportunities to produce and trade existing goods (especially if they are subject to diminishing marginal utility). Nor can the *supply* of novel products – while

1 This paper uses 'goods' to refer to any objects of market purchase decisions – that is, to refer to services, housing, financial products, artworks, and even labour, as well as manufactured products.

likely to trigger some reassortment of preferences to reflect an altered choice set – guarantee *demand* for them. Instead, rising demand relies on the creation of new objects that are seen as *promising* performance (Shackle [1972] 1992) or on changes in the social and market-generated attributions of value,² symbolic qualities, and imagined futures to existing goods.

Colin Campbell (1987) argued that a demand-side revolution was a necessary complement to the supply-side one seen during the United Kingdom's eighteenth-century industrial revolution. His explanation of the ever-quickening treadmill of new consumer desires and insatiable demand for goods – such as Wedgwood pottery – went beyond firms' growing focus on creating a series of new versions of fashionable goods and clever marketing to the historically contingent projection by consumers of daydreams of future pleasure onto new objects of desire. This paper follows Jens Beckert (2016) in arguing that demand in a modern economy is similarly created in the process of market interaction by firms, consumers, and intermediaries imbuing new and existing products with 'imaginative value' – based on the 'symbolic meaning' and identity associations attributed to them, as well as the relevant 'fictional expectations' generated in conditions of uncertainty. Crucially, such imaginative and symbolic value is fragile and requires – if it is to be maintained – constant reaffirmation through communicative practices in the market field. At a more general level, our comparative preferences for one good over another are also in continual flux because of an ongoing process of product differentiation and value reassessment, resulting from incremental innovation by producers and changes in the contingent classification schemas and 'judgment devices' (Karpik 2010) used to define and evaluate the symbolic and material quality of goods. If capitalist dynamics are to be understood, these processes of preference formation cannot be sidelined, as in standard economics, but must take a prominent place in the analytic frame.

Much of standard economics suffers from two further blind spots that are relevant to the nature of preferences. The first is the radical uncertainty of the future in capitalist economies that are characterised by relentless innovation and emergent behaviour in complex interdependent market systems (Beckert and Bronk 2018). As Shackle ([1972] 1992, 3) put it, 'What does not yet exist cannot now be known'. Novelty and the imagining of new products breaks the predictable links between past and future (Bronk 2011) and thereby reduces the capacity of economic actors to make probability forecasts about the consequences of choice or even to define their options and preferences on the basis of experience and historical data. Nor is this an occasional feature of markets. As Joseph Schumpeter ([1943] 1976, 84) noted, the type of competition that counts most comes from 'the new commodity, the new technology, the new source of supply', and – we

2 By 'value' this paper refers to the intersubjectively assessed worth of goods and not simply their market price. Market price (often used by economists and market participants to measure value) is a function of the available budget and the relative scarcity of the goods concerned, as well as reflecting relevant social or market-constructed and subjective evaluations by economic agents of the goods' respective qualities.

might add – the creation of new preferences. As a result, the economic system is subject to ‘unending disruption of the present’ (Beckett 2016, 23). The consequent indeterminacy ensures that expectations cannot be based on fully rational predictions but must be ‘fictional’ in the sense of going beyond observable truths and being guided by contingent imaginaries, narratives, and calculative tools (Beckett and Bronk 2018). Preferences and choice cannot be anchored in complete knowledge of possible future states of the world. Instead, they are also imaginative constructs, anchored and coordinated (to some extent at least) by the shared judgment devices, market structures, and social narratives that help actors make decisions despite the unpredictability of the future. Expectations, choice sets, and preferences all change with the unfolding of time.

The second blind spot relevant to the instability of preferences is the incommensurability of many underlying norms and values relevant to market products – contrary to the utilitarian assumptions baked into economics. In so far as market preferences relate to deeply held and socially constructed norms or values, these underlying values are incommensurable and often conflict with one another. In other words, different values or goals (for example, environmental, social welfare, or market efficiency goals) cannot be reduced to a single scale of value without draining ‘significance from some of the deepest conflicts that ethical life contains’ (Gray 2000). The absence of a single scale value implies that there is no uniquely rational trade-off between the different goals relevant to any market choice; and this renders dubious the assumption in standard economics that preferences for bundles of goods are transitive, complete, and consistent with each other – especially over time – and hence undermines the notion of unequivocal indifference curves (Bronk 2009). What is more, the trade-offs made are greatly influenced by shared identities and dominant but transient social narratives, so that changes in preferences are far from stochastic. A salient event and social movement, or the clever marketing of ‘ethical’ products, can all disrupt existing value trade-offs and preferences, leading to a marked shift in market equilibrium. Standard economics disregards ‘the fact that preferences are to a significant extent socially formed and hence reflect the society’s values, culture, and power structure’ (Etzioni 1988, 247).

This paper argues that the preferences expressed in market choice are partly constructed by contingent social and market-driven definitions and assessments of the respective qualities – material, symbolic, or imagined – of the goods being chosen between (Beckett 2016). Preferences are also influenced by the creation of new products and by the intersubjective construction of fictional expectations (and guiding narratives of what the uncertain future may hold) and the feelings of approach or avoidance they trigger (Tuckett 2011). And, finally, preferences are partially governed by a range of incommensurable and conflicting social values (and the unstable trade-offs between them) – values which become attached to goods as a result of contingent marketing practices and widely shared narratives. In short, preferences (except for very basic necessities) – and the value placed on most goods – do not exist in a social vacuum. Instead, they are partly constructed by the process of market interaction. For all these reasons, prefer-

ence formation should not be sidelined in economic theory but rather seen as critical to outcomes and endogenous to the operation of the capitalist system.

Carl Menger, Friedrich Hayek, and others in the Austrian school of economics were correct to note that the value of goods in markets is based on the *subjective* evaluative judgments of consumers (Bronk 2013; Carney 2021) rather than being an intrinsic and objectively observable feature of the products (or defined by the costs of making them). Where this paper differs from Austrian economics, though, is in our insistence on the *intersubjective* generation of the many evaluative criteria and judgment devices used to assess the quality of goods and form expectations of the future. Together these social and market constructs are central to the formation of individuals' subjective judgments and hence preferences. In other words, this paper rejects methodological individualism as unable to account for many of the important dynamics of market preferences and for the periodic unpredictability and instability of market outcomes they cause.

2 The different facets of preferences

The notion of 'preferences' – whether inside or outside economics textbooks – is a typical 'family resemblance' term or 'umbrella' concept (Wittgenstein 1994; Bronk 2009, 14), with different uses of the term forming a less than fully coherent natural family, 'constituted by a network of overlapping and crisscross resemblances' (Kuhn 1996, 45). At a basic level, it refers to pro and con attitudes, or feelings of desire (or aversion), which are not necessarily synonymous with an intention or decision to choose. In ordinary parlance and in textbooks (for example, Begg, Fischer, and Dornbusch 1994), preferences are often seen as synonyms for 'tastes' or a 'disposition' to choose (Pettit 2006). But no account of preferences is complete without acknowledging that the notion is 'comparative' (132) – involving the comparative ranking of alternatives – and it is this notion that has become central to standard economics. Indeed, economics generally works with a 'thin' definition of 'preferences' as the ordinal ranking of alternative bundles, with no attempt made to explain the substance of the preferences or the reasoning behind the ranking of alternatives.

This paper takes its cue from an array of social science and philosophical accounts that work with interlinked 'thick' definitions of 'preferences' that complement and inform the comparative-ranking aspect of the term. As Samuel Bowles (1998, 80) argues, preferences matter because they are 'internalized' as 'generalized reasons for behaviour' that frequently depend on explicit reasoning and learning from experience. This reasoning may involve information and calculation but also consideration of the imagined consequences of choice in relation to an agent's future interests, the symbolic value attached to objects of choice, and strongly felt social norms. Preferences are not merely disembodied brute tastes or gut feelings but are often the considered output of *deliberation* (Pet-

tit 2006) about how to balance and evaluate different goals and make judgments about various options in conditions of uncertainty. Crucially, this deliberation takes place in social settings and is strongly influenced by market institutions, judgment devices, and other intersubjectively constructed orders of worth (Stark 2009) and by firms' attempts to shape quality assessments through product differentiation and marketing. Broader social norms (often based on incommensurable and conflicting values) also frame and influence preferences, especially the 'metapreferences' of economic agents – that is, the normative preferences linked to identity that people have for the type of 'first-order' preferences they would like to express in their everyday market decisions (Marrow 2015).

3 Preferences in economics and reasons for a new approach

Much of economics is built around a remarkably 'thin' definition of preferences as the ability to make an *ordinal ranking* of alternative bundles of goods in situations of structured choice, where the ordering conforms to the axioms of rational choice (that is, the 'completeness' and 'transitivity' of such rankings), so that the preferences are internally consistent. Paul Samuelson (1948) famously went further in his effort to drain the preferences used in formal analysis of any assumed content, with his theory of *revealed preference*. According to this theory, if consumers or traders choose bundle 'a' over bundle 'b', for a given set of prices, they have a 'revealed preference' for 'a' over 'b'. Similarly, an agent's 'utility function' can be discerned by examining past choices in similar circumstances – a formulation that does not allow the utility function to explain the motivation behind the choice (Binmore 2009). If preferences and utility functions are to have explanatory power in accounting for changes in behaviour, we must be able to observe their nature and source independently of revealed choice and behaviour.

The ultra-thin 'behavioural notion' of revealed preferences looks to many philosophers like vacuous formalism (Pettit 2006) and was inspired by the logical positivist scepticism of all subjective notions of experience. Even its defenders admit that the theory is influenced by a desire to put the motivating causes of choice into a black box to allow predictions to be made about unobserved choices from past choice data (Thoma 2021). From such revealed preferences, taken as the choices consistently made in the past, economists can in theory derive *indifference curves*, each of which represents a continuous series of possible combinations (or bundles) of alternative goods among which the agent is indifferent; and these curves – when combined into a complete indifference map – allow for the prediction of behaviour on the basis of changes in the relative price of the goods, the budget available, and other constraints.

Revealed preference theory, for all its usefulness in modelling terms, ignores the contingency, ambiguity, and dynamics in real-life choice. If we are to explain goal-directed action outside well-defined game-theory or stable market scenarios, we must link prefer-

ences to what determines the subjective value that economic actors attribute to different courses of action in conditions of greater or lesser uncertainty. Simple textbook examples of the link between preferences and choices under well-defined sets of constraints and known pay-offs obscure the problems of value and the frequently weak epistemic basis of the expectations of the consequences of different choices. Only by going beyond the 'thin' and impoverished definition of preferences as the ranking of alternative bundles and by exploring what causes this ordering – in particular, the source and content of the contingent valuations and expectations that drive the ordering – can we understand choice and the unfolding of the economic system. Furthermore, it is only by questioning the assumptions of the transitivity and consistency of preferences that we can begin to explain the repeated evidence that 'the preferences that govern people's actual behaviour are often incoherent and unstable' (Sugden 2006, 209).

By assuming that preferences are revealed by past choices, and also that they are individually formed without any social influences (so that any variation in preferences can be assumed to be stochastic and tend to cancel out at system level), standard economic models can build in a representative agent with preferences that are taken to be stable shadows of past choices. However, in many cases, these modelling assumptions are misleading because they ignore changes in preferences caused by widespread product innovation (that expands the choice set), as well as the instability (and contingent social construction) of trade-offs between incommensurable and conflicting norms or values. They also ignore the dynamic and intersubjective construction of symbolic or imagined value and frequent changes (and heterogeneity) in the theoretical or narrative frames involved in the interpretation of products' material attributes. Preferences change in non-stochastic ways as product offerings, consensus levels of risk appetite, group identities, guiding narratives, social values, and judgment devices evolve.

Other, more nuanced approaches to preferences do, of course, exist in modern economics, and this paper builds on these. Much of behavioural economics, for example, examines reasons why economic agents fail to act on the basis of consistent, rational, and stable preferences. The interest here is largely in amassing robust evidence of predictable biases towards irrational and inconsistent preferences – particularly related to framing effects and loss aversion (Kahneman and Tversky 2000). George Akerlof and Rachel Kranton (2010) go one stage further and examine systematic links between preferences and group-level identity and norms, in the hope of creating more reliable models of the economy that can better predict the consequences of new economic policies and business practices. This approach has encouraged experimental studies that seek to measure the impact of 'identity primes' on economic preferences (Benjamin, Choi, and Strickland 2010). Of related interest is an empirical survey by Armin Falk et al. (2018) of the geographic and demographic distribution of average preferences and preference bundles – groups of complementary preferences – associated with different institutional frameworks. This study involved the construction of a 'Global Preference Survey' and revealed substantial heterogeneity in preferences across countries, but even larger within-country (for example, gender-based) heterogeneity. Perhaps not surprisingly, variation in prefer-

ences and preference bundles was found to be correlated with different economic outcomes – with a particularly strong relationship between income and the cultural norm of patience, as Max Weber might have predicted (Falk et al. 2018; Weber [1930] 1992).

These behavioural approaches allow substantive bolt-ons to standard economic theory that go some way to analysing the source and nature of market preferences, while holding out the promise of improving the predictions of economic models. This paper argues, however, that since social identities and corresponding preferences are often products of unstable and dynamic trade-offs between incommensurable and conflicting values within each society, they are often subject to sudden shifts prompted by salient events and contingent social or market-sponsored narratives. Akerlof and Kranton (2010, 6) correctly state that identities and norms can attach even to trivial decisions and ‘garden-variety tastes’ for ordinary consumer products like fruit and T-shirts; but, as section five of this paper explores, the instability of the value trade-offs involved makes prediction even in such standard consumer sectors surprisingly difficult.

From their empirical observation that ‘in many domains, people’s preferences are labile and ill-formed, and do not pre-date social and legal contexts’, Cass Sunstein and Richard Thaler (2006, 261) draw important normative conclusions. They argue that, since preferences in many cases are necessarily formed by organisational choices (for example, display techniques in shops or default rules for pension contributions), there are legitimate ethical questions about who should have the power to manipulate preferences and frame choices and in whose interests. Their conclusion is that, once it is acknowledged that the framing of preferences is subject to competitive efforts at manipulation by those with market power, there is a paternalistic argument for state intervention to prevent the market generation of preferences that are clearly damaging to people’s wealth, health, or the public good. This might include, for example, insisting on auto-enrolment into pensions as a default setting, with voluntary opt-outs to cater for those with non-standard value trade-offs, or insisting that supermarkets place sweets outside the reach of children near check-outs.

Bowles (1998) developed a more complete theory of *endogenous* preferences by examining the co-evolution of preferences and institutions.³ As he put it: ‘Markets and other economic institutions do more than allocate goods and services: they also influence the evolution of values, tastes, and personalities’ (75). For example, bringing new activities within the purview of markets – such as childcare and student learning – may alter perceptions of value, preferences, and behaviour beyond the impact of the market incentives themselves, as a result of ‘construal effects’ (87). Another example might be the mutual complementarities between a nation’s labour laws and individual preferences in relation to investment in firm-specific skills, or between a nation’s training regime and political preferences about the size of wage subsidies or the degree of labour market

3 For an attempt to incorporate endogenously changing preferences into welfare economics, see von Weizsäcker (2005).

protection (Estevez-Abe, Iversen, and Soskice 2001). The institutional framework, corporate governance, and training regimes of a country can have semi-persistent *cultural* effects on market preferences and behaviour.

The cultural impact of economic institutions and market framing upon preferences, outlined by Bowles (1998) and others, can be very important. However, these studies still understate the full *endogeneity* of market preferences unless complemented by a focus on the ongoing practices of producers, consumers, and intermediaries in co-creating quality and value assessments, by means of product differentiation, credible images of the uncertain future, and ‘intersubjective discursive engagement in the field’ (Beckert 2020, 292).

Behavioural economics and Bowles also understate the *instability* of preferences. Economic agents must continually (re)construct their preferences as new situations arise and when their existing preferences are poorly adapted to the problems faced (Lichtenstein and Slovic 2006). The COVID pandemic, for example, and its reinforcement (alongside recent technological innovations) of homeworking may well lead to a semi-permanent recalibration of preferences in a range of areas from the geographic locations favoured for housing to clothing fashions. The need to adapt to a net zero carbon future is likewise leading to wholesale shifts in consumer preferences. ‘Dynamic preferences’ and ‘preference uncertainty’ can also be the result of liberal societies privileging experiments-in-living and the active development of new preferences as part of identity formation (Delmotte and Dold 2021). The focus in the remainder of this paper, though, is on why dynamic preference formation and preference instability are natural features of *all* innovative economies embedded in societies with plural values, and where the quality of the goods being chosen between is continually contested and reassessed in a social process of market interaction between producers and consumers using a panoply of contingent judgment and accounting devices.

4 Innovation, preference formation, and uncertain futures

Modern capitalist economies are characterised by relentless innovation, which can involve radical changes in technology and ways of life or, more usually, incremental changes and product differentiation. The logic of market competition entails more than striving for the most efficient allocation of existing resources; it also includes the repeated introduction of new processes and products (Schumpeter [1943] 1976). This compulsive quest for the ‘new’ and for continual improvement leads to what Zygmunt Bauman (2012, viii) calls ‘liquid modernity’ – the ‘conviction that change is *the only* permanence, and uncertainty *the only* certainty’.

The corollary of supply-side innovation is preference instability and the creation of new preferences. Dynamic preferences are not merely the product of passive adjustment by

consumers to the availability of new product offerings but are also a function of firms seeing the preferences and needs of consumers ‘as something to shape, a material to transform, something that can be moulded like a piece of clay’ (Dubuisson-Quellier 2013, 253). Firms such as Apple often go well beyond responding to existing preferences revealed in markets or focus groups and seek to construct new preferences and create demand by using advertising and various business rituals, such as hyped product launches, to sell promises of new performance capacities and new ways of life (Beckert 2011).

It is important to distinguish here between two types of innovation and preference change.⁴ The first is the kind of *radical innovation* that leads to mass extinction events involving existing technologies and preferences and the creation of whole new market orders (Bronk 2009), or what Schumpeter ([1943] 1976) called ‘Creative Destruction’. Examples of this include the invention of the automobile. This led to novel preferences in a range of areas from paved roads, motels, and touring in national parks to garages and parking provision in city centres. At the same time, given the attendant collapse of a ‘subnetwork of technologies’ and institutions associated with horse-drawn travel, there was a sudden shift in preferences away from barouche boxes and stables (Waldrop 1994, 119). A similar phenomenon occurred when the word processor was invented, and preferences quickly shifted away from typewriters, secretarial staff, and fine fountain pens to home-working software packages and laptops. The creation of the internet and smartphones led to even more dramatic shifts in preferences across large areas of our working and social lives, from how we prefer to shop to how we prefer to communicate.

The *preference cascades* seen in these cases of radical innovation are partly natural recalibrations of preferences in the face of entirely novel technological possibilities and new constraints. In other words, there is often a natural tendency for a conformity of preferences to emerge in the face of increasing returns to new technologies and as a result of the inconvenience and social or economic costs of not conforming with new fashions and ways of life. By the 1930s, it would have looked rather absurd, and was far from easy, to ride a horse around London, given the noise of traffic and the absence of stables, and hence few citizens preferred (or even considered) that option, once cars became affordable. But preference cascades are also heavily influenced by dominant social narratives and shared imaginaries of the uncertain future. Radical innovation makes the future open and indeterminate. In such an environment, consumers gravitate towards credible narratives of how the future will look, and these narratives (or public images) often become performative, in part by crafting preferences. In many markets – especially those involving heavy investment, such as housing, cars, or university education – preferences and investments are oriented to the long-term future and are heavily influenced by how economic actors collectively imagine the uncertain future.

4 For the distinction between ‘radical’ and ‘incremental’ innovation, see Bengt-Ake Lundvall (1995).

The second, more common type of innovation is *incremental*. Instead of creating entirely novel products and associated webs of institutions and preferences, firms engaged in this kind of innovation are geared to producing minor variants in existing technologies and making piecemeal adjustments to product ranges and then promoting the distinctions in quality or price to consumers. In other words, rather than aiming for disruptive novelty in preferences, most producers are engaged in close reading of existing consumer preferences, with a view to making marginal changes in product differentiation or market positioning, ‘in order to create value from the introduction of a divergent definition of worth’ (Dubuisson-Quellier 2013, 258). Examples might include the introduction of more environment-friendly packaging, a cut-price ‘no-frills’ basic model of car, or a different edition of a book with a famous actor on the cover. Such product differentiation is a key part of value creation in most markets (Aspers and Beckert 2011).

The ordinal rankings that consumers make between products are frequently a function of exactly this kind of fine-grained product and quality differentiation and associated marketing campaigns. As such, they are, in part at least, the transient creations of firms and media, often involving bandwagon, fashion, and Veblen effects. Indeed, a large part of consumer demand in affluent modern economies is the result of similar processes. Many of the great industrialists have realised the power of imbuing new versions of a product with special status and aesthetic significance as a means of creating desire. As Charles Kettering of General Motors is quoted as saying in the 1920s: ‘The key to economic prosperity is the organized creation of dissatisfaction’; and accordingly, General Motors was a pioneer of annual model changes, designed to make people discontented with the model they already had and prefer a new one (Rifkin 1995, 20).

Radical innovation makes the future ontologically indeterminate (Bronk and Jacoby 2016), thereby causing economic agents to endure the sort of ‘fundamental uncertainty’ (Dequech 2001, 920) where it is difficult to know even the basic categories or type of goods that have yet to be created (Lane and Maxfield 2005; Shackle [1972] 1992). By contrast, the ubiquity of incremental innovation, and the proliferation of marginally differentiated products in many markets, largely increases the *quality uncertainty* that consumers face in relation to existing types of good (Beckert and Musselin 2013).

These two kinds (or degrees) of uncertainty are both critical to the formation of preferences, but in subtly different ways. In order to form preferences when the future is radically uncertain, economic agents must populate that future with imaginaries worth investing in (Holmes 2018) and create fictional expectations (Beckert 2016) – credible imaginaries of how the future will unfold.⁵ Preferences normally involve consid-

5 The imaginaries inspiring investment have become a good deal more rigorously formulated since the days of the eighteenth-century ‘projectors’ (Giraudeau 2010). But despite containing sober assessments of both feasibility and the sensitivity of projections to different assumptions, modern business plans – like the forward guidance issued by central banks – remain exercises in envisaging a future yet to be created by the interaction of all the relevant players. They are designed with a view to structuring investor expectations and preferences.

ered reasons for action and provide the emotional basis for choice by encapsulating expectations of the consequences of choice in relation to key values and interests. But, in conditions of radical uncertainty, it is not possible to *calculate* the future even in probabilistic terms (Knight 1921), leaving economic agents reliant on how they *imagine* the future. These imaginaries are heavily influenced by dominant narratives or market projections of the future, as well as knowledge of likely constraints, persistent regularities, and emerging patterns; and these contingent narratives in turn trigger feelings of approach or avoidance that play an important role in motivation and help shape investment choices (Tuckett 2011). Calculative devices such as scenario analysis and technology roadmaps are used as epistemic and emotional props to decision-making in conditions of uncertainty (Beckert and Bronk 2018) and help in the formation of preferences by delineating credible expectations about the consequences of choice; but the future remains, to some extent at least, unknowable.

By contrast, in markets dominated by incremental innovation, it is quality uncertainty – and the debilitating number of options that consumers face (Schwartz 2004) – that is paramount; and this entails a different architecture of value assessment, choice selection, and preference formation. In this case, it is not usually that the future is, in any general sense, radically uncertain, but that consumers struggle to make fine-grained distinctions between the quality of different goods across a wide range of options and arrive at the relative subjective valuations needed to inform their market preferences. As discussed in section six below, economic agents in such cases rely heavily on judgment devices (Karpik 2010) and a whole ecology of market-generated instruments for constructing meaning and value (Beckert 2020). The subjective valuations that inform preferences are the product of an interactive process of engagement by producers, consumers, and intermediaries in the various distinct market fields. This intersubjective process ensures that changes in market preferences are partially coordinated, thereby reducing the contingency of future outcomes.

5 Incommensurable values and preference instability

Many market-expressed preferences are influenced by deeply held social values or norms (Sen 1977; Etzioni 1988). This influence can be indirect, because norms govern the ‘metapreferences’ (Marrow 2015) that agents have for the type of first-order preferences and behaviour they should exhibit in markets; or it can be direct, because values become associated in the minds of economic agents with particular goods in their choice set (often thanks to marketing or media scrutiny). However, rather than these socially constructed values necessarily reducing preference uncertainty (and improving the consistency of preferences), they can themselves be a source of preference instability. This is because, contrary to the assumptions of utilitarianism with its universal scale of value (pleasure or utility), moral values are inherently plural and incommensurable

– that is, they cannot be reduced to a single scale of value without a serious loss of ethical texture (Berlin 1999; Gray 2000). This lack of a common currency for moral judgments means that, when different values or goals (for example, poverty reduction and economic efficiency) conflict with each other, there is often no single rational trade-off on which rational actors converge as the appropriate ethical frame for their preferences and behaviour. However much expert analysis of the implications of different trade-offs is carried out, there remains a contingent and identity-defining choice to be made about the weights to be given to different values (Bronk 2009).

Value pluralism – the ethical doctrine that rival values are inherently plural and cannot be derived from a single self-consistent and universal system of principles or compared with one another according to a single metric of ultimate value – explains two important anthropological facts. The first is that different nations, or groups within nations, will tend to define their collective identity by making different choices about the appropriate trade-offs between incommensurable and conflicting values (for example, between freedom and equality, or between environmental goals and economic growth) – leading to different geographic or cultural clusters of market preferences.⁶ The second is that, since good reasons can be adduced for different trade-offs between the rival values or goals, perfectly rational individuals often ‘remain ambivalent and undecided; or they display inconsistent preferences over time’ (Bronk 2009, 177).

One response to this *moral indeterminacy* is that consumers often develop multiple identities or mental accounting systems. The preferences they display, for example, when acting as a parent may be different from when they act as an employee or lover. Moreover, it is not only that as individuals we all tend to become ‘creative accountants when it comes to keeping our own psychological balance sheet’ (Schwartz 2004, 67). Firms also exploit these different mental accounts – for example, by targeting environmentally unfriendly luxuries at one of our identities (or preference sets) and cost-cutting or ‘green’ workarounds at another.

Value pluralism contradicts the ethical doctrine of utilitarianism, with its assumption of a single ultimate source and measure of value and, for this reason, it has an uneasy relationship to economics. Economics has been heavily influenced by utilitarianism, not least by importing its basic model of human motivation, with economic agents seen as self-interested maximisers of their own utility. In order for this to be remotely plausible, economics normally retreats to a ‘thin’ formal definition of ‘utility’ as the satisfaction of preferences (whatever they are). Nevertheless, the use in economics of cost-benefit analysis to measure the overall welfare impact of different policies continues to ape the basic utilitarian assumption of a single scale of value or utility, by rendering the market and non-market impacts of policy choice in relation to different goals commensurable on a single scale of monetary value (and willingness to pay). In so doing, it masks underlying contested trade-offs between values, while making interpersonal comparisons of welfare.

6 See the empirical findings in Falk et al. (2018), discussed above.

This feature of cost-benefit analysis is an extension of a major cultural impact of markets themselves – their tendency to render different goods (whether singular goods, commodities, basic necessities, luxuries, charity work, or labour) commensurable in monetary terms (Fourcade 2011). Among other things, this has the effect of placing particular weight on the willingness to pay of the wealthy as a result of their greater purchasing power. This means, for example, that GDP growth is a better measure of increases in the satisfaction of the market-expressed preferences of the rich (who dominate activity in monetary terms) than of average citizens (Bronk 1998). As an implicit measure of welfare, GDP also suffers from the exclusion of preferences for non-market goods. Such marketisation of value assessments and implicit welfare measures can – just as Karl Polanyi ([1944] 1957) predicted in the case of the commodification of labour – trigger counter-movements of political protest and weaken the social preference for market exchange itself.

Outside welfare economics, modern standard economics has, at least since Lionel Robbins (1935), tried to avoid the Scylla of value pluralism and the Charybdis of utilitarianism by avoiding cardinal measures (and interpersonal comparisons) of utility. The theory of revealed preference, for example, relies only on the *ordinal* ranking of preferences by each individual and does not require cardinal comparisons of utility for the construction of indifference curves. All that is assumed is that individuals can rank their own preferences according to supposedly self-evident axioms of rationality. In practice, though, even this assumption is implausible unless each individual has access to a finely calibrated personal scale of relative valuation that could generate the complete and consistent rankings used in indifference analysis. A moment's introspection reveals this not to be the case. Much of the time, economic actors are in agonies of indecision about whether, for example, to prefer full-time working or extra time with their children; and, for many possible combinations of goods – while some bundles are clearly more or less attractive – there is often a wide boundary of indifference or indecision (Bronk 2009). Indeed, as Amitai Etzioni (1988) argued, economic actors are 'moral wrestlers', constantly trying to resolve conflicts between self-interest and commitments to various communitarian values and ethical narratives.

It is sometimes supposed that such problems with constructing complete and consistent rank-orderings of preferences (that have the stability over time required if indifference curves are to be useful for prediction) pertain only to ethically fraught decisions about singular goods (like childcare) or the boundaries of economic life, and not to choice between everyday consumer goods. In practice, though, the construction of indifference curves even for basic consumer markets, such as that for fish or vegetables, can be highly problematic. Consumers may not have consistent substitution ratios between, for example, sea tuna and fish-farmed salmon, or between organic and fair-trade bananas, based purely on relatively stable tastes. Instead, a number of incommensurable and conflicting values come into play, with their relative importance to market-expressed preferences highly dependent on social context, fashion, political narratives, contingent trade norms, and product marketing by firms. 'In these cases, the actual preferences we

reveal by our market choices are a product of a series of complex self-defining trade-offs between incommensurable, and often conflicting, environmental, health, status and taste concerns. Revealed preferences and current price tags may provide mere snapshots of a maelstrom of unstable incommensurable value trade-offs' (Bronk 2009, 194).

Crucially, the instability of preferences seen at individual level will not tend to sum at market level to merely stochastic variation in preferences. This is because many influences on the value trade-offs made are the product of market-wide or social influences. Dynamic trends in preferences are often intersubjectively formed.

6 The market construction of value and preferences

Market-expressed preferences depend on assessments of the *quality* of alternative goods. In many cases, particularly when dealing with the non-material (symbolic, aesthetic, or positional) aspects of goods – or with the imagined attributes of novel (yet-to-be-experienced) goods – this quality is highly uncertain and subject to an ongoing and contested process of market definition and redefinition by competing groups (Callon 2005). Quality uncertainty is not just a problem of asymmetric information (Akerlof 1970) 'but rather reflects the elusiveness of collective definitions of quality' (Beckert and Musselin 2013, 21). Assessments of the quality or value (in a non-monetary sense) of competing goods – and hence preferences for them – emerge through the social process of market interaction and with the involvement of contingent judgment devices (Karpik 2010). As a result, preferences are endogenous to market systems, and they are intersubjective, reflexive, and prone to multiple short-term equilibria.

The 'quality' of goods – their distinctive attributes and value (measured according to some standard) – is far from self-evident and is always mediated by the conceptual categories that economic agents internalise. This is true even of the material aspects of products. It is a commonplace of post-Kantian philosophy that all facts are partly constructed by the application of principles of selection and categorisation to the manifold objects of experience. Without conceptual categories, we could make no sense of the chaos around us (Bronk 2009). Nowhere is this truer than in our interactions with the full range of financial products and consumer goods. Many financial products, for example, are constructed and defined by contingent accounting conventions and modelling practices (MacKenzie 2006); and many consumer goods or services derive part of their meaning for economic agents from the classifications created in markets to differentiate and attribute qualities to them through product differentiation, branding, and marketing (Akyel 2013).

The market order created by these classification processes both reflects and influences the distribution of market power (Bourdieu 1984; Foucault 1982). In some cases, the

acceptance of consensus classification schemes helps create the very possibility of viable markets, as in the case of the antiques market (Bogdanova 2013). But, since in most markets ‘each standard and each category valorizes some point of view and silences another’ (Bowker and Star 2002, 5), and since they are key to the assessment of value and the creation of preferences, they are hotly contested.

The assessment of quality differences *within* product categories is a key driver of consumer preferences for one product over another. In large part, this assessment depends on the use of *judgment devices* (Karpik 2010) that allocate goods to categories and sort them according to various contingent scales of value. Examples include credit ratings, product tests, certificates of authenticity, guidebooks, and fair-trade labels. In some consumer markets, particular judgment devices attain (for a time at least) pre-eminent credibility in the assessment of quality – Michelin stars for restaurants, for example – and they help construct preferences in the field. In the case of the wine market, where symbolic meanings and status play a large role in defining the quality and value of products, the rating system of Robert Parker has had a legendary impact on the preferences of wine connoisseurs (Garcia-Parpet 2011). In the case of both Michelin and Parker guides, the influence on preferences is so significant that restauranteurs and wine producers try to produce products that meet their criteria or stand a good chance of attaining the accolade – a reflexive feedback process from judgment device to the production of quality.

In the art world, quality assessment – and the ability of consumers to judge value and form preferences – is dependent on the intersubjective construction of value by top galleries, auction houses, critics, and famous collectors, who dominate a ‘market field’ that is organised hierarchically (Beckett 2020). As a result, the art market is structured by a narrative web of evaluation in which different key actors observe each other’s valuations and quality assessments in ‘a game of reflecting mirrors’ (Moulin 1986, 374).

The art market is just one case of the construction and constant recalibration of individual subjective valuations and preferences as a result of interaction with the assessments and choices of other economic agents. Another example is the impact of the decentralised online rating of products and services by consumers. In such cases, individual preferences and market choices are strongly influenced by the contingent opinions of other people – in ways that are partly dependent on the particular algorithms employed by the likes of Amazon and TripAdvisor. Thorstein Veblen ([1899] 1973) analysed a subtler form of intersubjective preference formation in the case of conspicuous consumption: because status is signified by the possession of particular (rare) goods, imitation of the goods themselves and of corresponding preferences by those with lower social status leads to a constant updating of preferences to reflect new opportunities for positional or status advantage.

More generally, the *symbolic qualities* and *imaginative value* of consumer products tend to be contested and fragile and require ‘constant reaffirmation through communicative practices to be maintained’ (Beckett 2016, 204). Even in the case of ostensibly material

products like petrol, symbolic value (positive or negative) can be very important in determining market preferences. This explains, for example, the marketing campaigns of Shell in the 1930s – with their beautiful posters of the English countryside and coast by renowned painters, such as Frank Dobson ('See Britain First on Shell') and Paul Nash ('Everywhere You Go You Can Be Sure of Shell'). It also explains the branding efforts of the tyre company Michelin with the help of the ubiquitous Michelin Man and green touring guidebooks. In both cases, leading companies in their fields spent large sums associating material products with the freedom of the road and the beauty of the countryside. Suffice it to say, the symbolic value of petrol cars is now more hotly contested, and even the big oil companies are fighting a rearguard action to prevent their products becoming symbols of the destruction of the environment rather than the means to enjoy it.

For many less established products and brands, the symbolic values and fictional expectations that attach to goods and determine preferences are particularly 'unstable, even evanescent, since they are largely anchored in the inter-subjective recognition of symbolic qualities' and imagined uses (Beckert 2016, 192). Market success can be quickly followed by failure when 'the space for dreams associated with a particular brand no longer resonates with the symbolic needs of a large enough group of customers' (Djelic and Ainamo 1999, 628). But, for the time that the dream of a life-changing holiday (or membership of a status group) successfully attaches to a product, the imagined pleasure associated with it can be felt in real time as desirable and trigger feelings of approach sufficient to motivate consumers and charge their preferences with emotional valence. As John Stuart Mill ([1873] 1989, 123) put it, such 'imaginative emotion' is 'not an illusion but a fact, as real as any of the other qualities of objects'.

7 Conclusion and potential implications for the discipline of economics

Preferences are a key driver of the dynamism of capitalist economies and the instability of markets. Far from being exogenously 'given', as usually assumed by economists, preferences are endogenous to market processes – in particular, the competitive drive by firms to create new products, new preferences, and new judgment devices. Preferences are strongly influenced by contingent imaginaries or fictional expectations relating to the uncertain future, and they depend on contested market definitions of product categories and intersubjective assessments of quality. Preferences are also the product of contingent trade-offs between a variety of social norms that are incommensurable and conflict with one another. These three factors ensure that market preferences are unstable and that any equilibrium in market prices tends to be transient.

Despite these complex processes driving preference formation and market instability, standard economics shows little signs of moving beyond its narrow assumptions that preferences are stable, complete, transitive, and exogenous to the market process. In-

deed, economics remains largely resistant to debate about these assumptions, and proposals to introduce endogenous or adaptive preferences take place at the margins of the discipline. Why is this the case?

The answer is presumably that substantial attempts to incorporate the instability and endogeneity of preferences challenge many of the fundamental methodological and normative foundations of standard economics and the related ideology of neo-liberalism. The intersubjective nature of preference formation contradicts methodological individualism. The dynamic character of preferences and underlying trade-offs between incommensurable values creates a constant flux in indifference maps, with the result that unequivocal choices between bundles of goods and predictable equilibria become completely implausible and welfare effects cannot be measured. At the same time, from a policy point of view, the deliberate influencing of preferences by firms challenges the notion of consumer sovereignty and suggests an important role for the state in regulating markets. Introducing a realistic depiction of preferences and their instability would be hugely consequential for economics and market ideology – a fact that goes a long way to explaining the discipline's dogmatic insistence on maintaining its unrealistic assumptions.

One response by economists to the issues raised in this paper is to acknowledge their importance but insist on a neat division of labour (Hausman 2006): the economic impact of *social* values and institutions and the whole question of how preferences are *formed* should, it is argued, be left to philosophy, sociology, and psychology, while economics focuses on the allocative properties of markets when preferences are assumed to be given, consistent, and stable. Mill ([1830] 1877), for example, argued that economics can derive useful predictions and general laws of behaviour despite its restricted assumptions, so long as anyone making *applied* use of its models to explain messy contingent circumstances remembers to add back in the effects of the 'disturbing causes' (or other causal factors) studied by other relevant disciplines.

Such a division of labour keeps the theoretical edifice of standard economics intact, but at the cost of rendering many of its predictions at odds with empirical observations in large-world settings, as has been painfully demonstrated by behavioural economics and sociology alike. Economic models using standard assumptions are unlikely, for example, to be useful predictive tools in innovative or ethically contested markets, where preferences are particularly dynamic and unstable. A broader problem is that the different aspects of economic reality revealed by different disciplines (according to the division-of-labour approach) tend not to operate in neatly defined 'reserve areas' – each with its own discrete type of motivation (Bronk 2009, 246). Instead, the different causal tendencies isolated respectively by economics, sociology, and psychology often interact with each other across all domains.

For this reason, there are frequent attempts to improve economic models by incorporating the insights of other disciplines. It is possible, for example, to construct economic models with indifference curves and preferences that (instead of being individually

formed) are socially generated and reflect dominant market narratives and power dynamics. ‘Narrative economics’ (Shiller 2019) points in this direction. Such approaches, however, face problems of their own. In particular, it is not clear how possible it is to design a single improved paradigm of economics, which bolts onto its central assumptions the systematic findings and important contingent trends noted in other social sciences – without it becoming as cumbersome as Ptolemaic astronomy was when it tried to correct for the observed failings of assuming an earth-centred universe by incorporating more and more ingenious bolt-on amendments (Kuhn 1996, 68–69). Standard economics derives its usefulness as a diagnostic tool for analysing behaviour by avoiding continuous post hoc theory rationalisations and retaining a clear and provocative set of assumptions. All this is put at risk by introducing too many ad hoc amendments to these assumptions.

For this reason, interest is increasingly turning to a form of ‘disciplined eclecticism’ (Bronk 2009) or *interdisciplinary* research, where the specialist insights of economics, sociology, anthropology, psychology, and political economy are all brought to bear on the analysis of particular real-world settings and problems – with the exact mix of disciplinary focus driven by the nature of the problem rather than prior methodological commitments. This approach promises to make use of the advantages of specialist disciplinary focus without suffering the disadvantages of ignoring key factors that cannot be illuminated with the tools and assumptions of any *one* discipline. Nevertheless, the practical challenges of interdisciplinary research are well-known – not least the difficulty of deriving testable predictions and hypotheses that apply across multiple settings.

One interesting recent response within economics to the *indeterminacy* of market outcomes, wherever uncertain futures, incommensurable values, and intersubjective value assessments are key factors, has been to incorporate the insights of complexity science. ‘Complexity economics’ provides useful tools for understanding emerging patterns in markets containing ideational and product mutations, constantly updated social heuristics, and increasing returns to newly dominant frames and technologies (Arthur 2015). A fascinating implication of such research, however, is that if economics wants to take the indeterminacy of the future seriously and account for the *causes* of capitalist dynamics, it needs to adjust its self-image away from being a fully predictive and testable science to one that behaves more like meteorology or genetics. Unlike Newtonian mechanics, these state-of-the-art modern sciences accept that it is possible only to make limited forecasts over short horizons (taking multiple context-specific factors into account) and that crucial aspects of the world can only be fully understood *after the event*. If standard economics wants to work with the insights of other disciplines in analysing the dynamics of preference formation and consequent market instability, it may similarly need to accept that its models can at best *simulate* the future and help spot emerging patterns, while feeding into the interdisciplinary analysis required to explain more fully the present and the past.

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