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Ecologies of Valuation: Ridding as a Mechanism for Valuation of Used Goods

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Abstract

When used consumer goods are exchanged, valuation proceeds differently than in markets for new goods. Many studies emphasize the social or socio-technical nature of valuation processes. This article outlines the difficulties inherent in these approaches when it comes to understanding valuation of used goods. These approaches, somewhat paradoxically, obscure the greater situatedness of contextualized "moments of valuation" in material flows and in relation to production processes. The ecological approach developed here shows that moments of valuation are never divorced from temporally and spatially prior and subsequent moments of valuation and waste production, and cannot be fully understood if not considered alongside the conditions in which the goods being valued are produced. The subtractive logic of ridding is crucial in the processes of production and valuation of used goods. This article draws on ethnographic and interview data from fourteen months of fieldwork in England to show how used books are valued in an ecology that stretches across connected moments and sites.

Keywords: valuation; waste; used goods; qualification; ecology

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Introduction

In 2016, IKEA's chief sustainability officer, Steve Howard, made headlines when he observed that "in the West, we have probably hit peak stuff" (Howard 2016). What happens to all our *stuff* when we decide we no longer want it? Not all of it gets loaded into attics and basements, or thrown into landfills, though much of it does. Used goods circulate, are exchanged, are bought and sold. This paper deals with the question of value in the exchange of used goods. What are the social processes whereby used consumer goods, discarded by their previous owners, are made once again valuable? And what does this question help us see about the ways that valuation is theorized?

It is now accepted within valuation studies that performances of value are highly situated, and that spatial, temporal, and social specificity are not incidental or trivial in the outcomes of valuation processes. Each instance of valuation takes place in a particular location—a concert hall, an art gallery, a point of sale—and has a beginning and an end point, lasting minutes or even years (Hutter and Stark 2015: 4). This observation is indeed the essential starting point for an account of valuation processes; "moments of valuation" (Antal et al. 2015) are always situated and contextual. These approaches to valuation as a situated practice provide a great deal of insight into the historical, social, symbolic, and technical factors which structure valuation processes. They tend, however, to abstract away from production processes, leaving intact an implicit linear sequence of production, then valuation, then consumption, then wasting.

Drawing on insights from waste studies, I present an alternative view of valuation as part of an ecology of interconnected spaces and material flows. The ecological approach shows that situated moments of valuation are never divorced from temporally and spatially prior and subsequent moments of valuation and waste production, and—crucially—cannot be fully understood if not considered alongside the conditions in which the goods being valued are produced. Following Hutter and Stark (2015: 5), I show that the moments before and after value is settled or agreed upon are characterized by dissonance and unsettledness: there is more than one possible framework for assessment, and more than a single value system for establishing worth. Departing from their approach, however, I will conceive of these moments not as located within one individual or judging entity who must reconcile dissonant orders of worth, but as distributed spatially and temporally and among contiguous spaces of exchange whose existence is mutually beneficial and contingent. Further, the dissonance is not only a matter of competing cognitive schema or abstract assessment frameworks. It is also a matter of a material reality which needs to be physically manipulated *in order to* deploy these schema and frameworks effectively. In this framing, a picture emerges of the importance of waste and wasting to processes of valuation.

Central to the ecological model is the practice of ridding. I use the term "ridding" in line with Gregson (2007), who describes it as a kind of divestment, but one which is firmly located within a larger system within which things and materials cycle. Gregson describes the ridding she observed in her anthropological work inside households:

> Ridding events were disclosed not as discrete events marking key moments in the social lives of things, their passage from one value regime to another. Rather, they occurred as part of a seamless flow of appropriation and divestment, storing, keeping and holding, involving an array of things in the domestic sphere. (2007: 20)

Ridding therefore refers to a kind of waste production, but one which does not conceive of waste as an endpoint. Further, it does not necessarily imply that the value of the things being "wasted" falls to zero (Thompson 2017) or becomes negative (Moore 2012). In fact, ridding is often characterized by attempts to dispose of items which are understood to still have use value or exchange value, by selling them or passing them to someone who can use them (Gregson et al. 2007: 3).

Many studies of valuation practices emphasize the need to qualify or frame objects as desirable goods (especially those which portray the work of qualification as marketing surrounding the moment of exchange; see for instance Hirschle in Beckert 2016: 191 or Callon et al. 2002). Quality is not intrinsic to a good but must be constructed; it is "the outcome of a collective process in which products become seen as possessing certain traits and occupying a specific position in relation to other products in the product space" (Beckert and Musselin 2013: 1). In this reading, qualification happens subsequent to production. This article, however, builds on observations that in the case of used goods, a supply of heterogeneous materials and things is more continuously *transformed* into value-able goods (Gregson et al. 2010). To understand how value is created, we must understand how goods are iteratively produced and re-produced through pragmatic, concrete processes of processing, sorting, categorizing, and/or (most crucially) ridding via various channels. I call this type of value production—which is material, spatially and temporally diffuse, and based on ridding—"subtractive production." Conceptualizing valuation as connected to production which is subtractive rather than additive brings into view the "residue" of valuation practices (see for instance Thompson 2017: 101).

If valuation studies, then, have demonstrated the situatedness of valuation practices, waste studies encourage us to think about the extent of their "ongoingness" (Herod et al. 2014). In other words, we should think about processes of valuation—and the goods being valued—as spread across time and space. By considering the question

of the valuation of used consumer goods first through the prism of value, and then through the prism of waste, I make a case for studying valuation with waste in mind. After these theoretical considerations, in the second half of the paper I illustrate this waste-minded approach with the case of used books in England. Drawing on ethnographic and interview data from 14 months of fieldwork, I trace the outlines of an ecology of used books through various spaces of collection, sorting, distribution, and exchange.

Valuation as a situated practice

How far do accounts of valuation as a situated practice go toward understanding the processes necessary for understanding valuation of used goods? Sociological and science and technology studies (STS) approaches have presented valuation as a social or a socio-technical process to explain how goods are assigned particular qualities and valued by market actors. These social and socio-technical explanations provide us considerable insights into understanding how goods are valued. There have been, however, relatively few attempts to understand what is specific about the functioning of markets for used consumer goods.

Sociological approaches have tended to stress the historical and cultural contexts that shape social conceptions of particular types of goods. The perceived value of particular items or types of items is contingent on broader social, cultural, political, and cognitive structures which reach beyond the moment of valuation. In other words, valuation processes are embedded in multiple dimensions of social life (Zukin and DiMaggio 1990). In her discussion of the market for Russian antiques, Bogdanova notes that valuation should be understood as "part of a process that reflects social, cultural, and political" factors of the society in which the valuation takes place, and as a cognitive process that requires specialized knowledge (2011: 2). In order for a market for antiques to emerge and operate, then, old furniture must be understood to be something attractive and desirable, and there must be people who have the knowledge necessary to recognize distinctions between eras, types of construction, styles, and so on. Crucially, the buyers and sellers of these things must occupy social positions which grant them legitimacy to make such claims about value.

When used goods are exchanged, an additional dimension of information asymmetry is introduced into the analysis: how does one know that one should trust the seller to sell as advertised (Akerlof 1970)? Questions of uncertainty and authenticity figure prominently in accounts of the valuation of antiques (Bogdanova 2011, 2013). Amazon.com is a platform that makes transactions between far-flung buyers and sellers possible, which means that uncertainty must be overcome in ways other than building direct interpersonal

relationships. When used books are bought and sold on Amazon, the standardized rating systems for both the material condition of the book and for the seller provide some assurance about the quality of the item being sold; Amazon also has a generous return policy that lends some security to the transaction. Used books are generally not high-priced items, except in rare cases of valuable and collectible editions. Despite the relatively low price and correspondingly low risk, however, it is still necessary to demonstrate the quality of the items with a reasonable degree of certainty.

STS approaches have contributed an added focus on the socio-technical dimension of value production. Economic value is not only socially produced, but is performed through the mediation of economic models (Callon 1998; Fourcade-Gourinchas 2003); economic ideas about how markets can or should function (Garcia-Parpet 2007; Rona-Tas and Guseva 2014); and infrastructures and tools (Preda 2006; MacKenzie et al. 2007; Pinch and Swedberg 2008). Karpik (2010) has drawn on this tradition to develop the concept of "judgment devices" like rating systems, rankings, guides, expert advice, and so on, which provide customers a sort of mental and technical scaffolding for forming judgments about the quality of products which do not have single, agreed-upon scales according to which their quality could be measured.

The socio-technical demonstration of quality and production of value is apparent when considering the sale of books online. Like the strawberry market in one of the pioneering texts on the "performativity of economics" (Garcia-Parpet 2007), exchange in the Amazon marketplace is shaped by various kinds of technical knowledge. On Amazon books are sold under a unified listing for a particular title, with options for purchasing the hardcover, paperback, or Kindle version. The content of the book is rated by high-prestige reviewers as well as customer reviews. If the interested party decides to buy a copy, s/he can scroll down a list of vendors offering copies of the book, used and new, at varying prices. The array of prices is clearly laid out to be evaluated by the potential buyer. Some of those prices are set by dynamic pricing algorithms which automatically adjust in response to competitors' prices and consumer demand (Chen et al. 2016). Each seller also has a rating that reflects customer satisfaction based on feedback over the past 12 months, so a potential buyer can evaluate his or her likelihood to feel positively about a transaction undertaken with a particular seller. On an Amazon page for a book listing, then, the "moment of valuation" is heavily scaffolded by multiple judgment devices.

The qualities of a used item are demonstrated by some of the same judgment devices as is the case with the new ones, as outlined above. But a new book is mainly valued according to content: has it been well reviewed? Does the potential reader know of the author and expect to

find the latest product entertaining, enlightening, or helpful? These are all dimensions that Karpik (2010) deals with in his discussion of the value of "singularities." For used items, however, there are significant material considerations which are not part of the qualification process as it is conceived of in the study of valuation of new items. Every used item has a unique wear pattern, making each item a "snowflake" (Rivoli 2006: 178). Will the copy be battered and worn or like new? Will the pages be heavily annotated? Will any pages be missing or torn? On Amazon, used books are sold with the use of a judgment device that is unnecessary in the case of new books. Each used copy available for purchase is ranked according to condition. Amazon's "Marketplace Items Condition Guidelines" standardize the material condition of the books so that a potential buyer can evaluate the options offered by the various sellers.

These material concerns may seem to be a self-evident and trivial dimension involved in the selling of used items. In fact, secondhand markets are often treated in economic analysis as a competitive alternative to the firsthand market (Fox 1957; Kim 2013) where the same products are offered in used form, and therefore at a discount. The qualities of books necessary for qualification when they are new, however, are connected to a particular type of production process: one in which the content is created once and distributed via a mass-production system. While they may choose between hardback, paperback, and Kindle versions, potential readers do not need to employ judgment devices that are sensitive to the quality differences between individual copies of the book, as quality is standardized across the supply of exemplars of the book, thanks to mass production.

In conceptualizing valuation as a phenomenon to be understood in its own right, discussions of qualification and valuation all too often leave aside supply-side—production—dynamics. The discussion above illustrates how modes of valuation which follow from processes of mass production are no longer exactly sufficient once goods have been altered through acquisition and use. The focus on how uncertainty is overcome and how quality is reliably demonstrated, through both social and socio-technical mechanisms, have been part of a program to focus on the "demand-side" aspects of exchange which have been left out of economic accounts (Beckert 2009: 253, 2016: 212). The result is that valuation and production are often not considered together.

Despite the insights gleaned from existing approaches to valuation of unique goods, understanding the valuation of used goods requires a shift in how we think about the relationship of valuation and production processes. When valuation is analytically detached from production, the "situated" moments of valuation explained by social and socio-technical approaches are actually circumscribed, detached from underlying material realities. I argue here that it is essential to

understand how these situated moments of valuation were constituted (see also Mintz's explanation of the preconditions of a consumer's choice (1985: 182)) in order to arrive at a more a complete story about valuation. If production is conceived of as something which always happens prior to valuation, valuation can be explained as a process that happens in the confines of a free-standing market, separate from production (albeit one embedded in society and culture). On the other hand, if production is understood as central to valuation processes, markets must always be explained in terms of larger systems of material flows, control of resources, and technological and organizational processes. Understanding the valuation of used goods, then, requires troubling underlying assumptions that the qualification of goods is part of an implicitly linear process, suggesting "a linear flow of objects and influences along the chain from production to consumption" (Entwistle 2009: 166).

Similar arguments have been made by other valuation scholars. Vatin has argued that the articulation between production/work (studied by sociologists, technicians, or managers) and exchange/market (studied by economists) should be reconsidered where viewing them as separate unconnected spheres obfuscates the debate about the genesis and transformation of value (2013: 40). While he does not prescribe their unification via a return to a Marxist labor theory of value, Vatin does observe that this artificial separation of domains, perpetuated in the sociology of conventions as well as in the new economic sociology, amounts to a "disconnection from reality" (2013: 41). More than leading us to the now-truism that valuation is work, his observation should prompt us to analytically link production and valuation. While disagreeing with Vatin's proposal to use two separate concepts for what happens during production and exchange, Heuts and Mol also argue that the "evaluation" of the market and the "valorising" of the production process are hard to separate and should be considered together (2013: 129).

The central role of production has also begun to appear in sociological discussions of the value of goods, though it is not necessarily explicitly recognized as such. Studies of how people are turned into commodities with economic value, like models (Mears 2011; Wissinger 2015) or Hooters waitresses (Newton-Francis and Young 2015), take pains to show that the making of these commodities is accomplished through human labor, including that of the models/waitresses themselves. The way that humbler commodities are produced is also relevant to valuation processes. In the market for timber, quality of the finished product is indeterminate at the moment of purchase, because sales are made long before the trees are actually mature (Aspers 2013: 75). Aspers observes that temporality is a relevant complicating factor in valuation in all markets, though in natural resource markets this problem is more pronounced. At the time

of exchange, it is often not clear what a good's quality is: "a good is being traded even as neither party has exact knowledge of what the economic result will be" (Aspers 2013: 75). He concludes that the temporality of qualification increases uncertainty in exchange, and trust between buyers and sellers is necessary to overcome this uncertainty. But rather than focusing on the temporality of *qualification*, we might recast his conclusion slightly in terms of the specifics of *production* of the goods in question. In the particular case of timber trading, Aspers says that "its long production time and its always singular tracts" (2013: 75) are what make the actual quality of timber indeterminate until long after the formal exchange has been made. By making this very slight shift, Aspers's findings about the importance of trust in overcoming uncertainty in the exchange of timber show us that the manner in which a good is produced has a central role in the ways that it can be qualified and thus valued.

In the next section I develop the concept of the ecological approach to valuation, and the related concept of subtractive production, and describe how it can help contextualize "situated" understandings of valuation. I then use the ecological approach to describe the valuation of used books in England.

Toward ecologies of valuation

A growing body of literature within anthropology and human geography on waste and recycling provides insight into social processes that surround the management of used things, from used clothing and textiles (Norris 2012) and other household possessions (Gregson et al. 2007) to e-waste (Lepawsky and McNabb 2010), mass landfill waste (Reno 2009; Woolgar and Neyland 2013), and industrial and toxic waste (Gille 2007). These studies largely draw on ethnographic engagement with valuation practices to show the labor necessary to accomplish actors' desired effects. Labor is always required to move materials from place to place, as well as to establish and maintain categories of cleanliness and pollution (Reno 2015: 561). Materials, goods, and infrastructures must be encountered and manipulated, rather than simply taken as given, in order for actors to derive value from them or to express a desired order of worth.

Many of these scholars have pointed out that mainstream global value chain and global production network approaches are insufficient for understanding how value is produced for used items. First, somewhat paradoxically, there is a lack of discussion within value chain analysis of "how and by what processes value is created" (Gibbon et al. 2008). Second, global production network analyses, focusing on how trade and production are coordinated, have overwhelmingly focused on production of new goods rather than the "back end" of the global economy (Brooks 2013). Furthermore, the conceptualizations of value production that have been elaborated in

these approaches are ill-fitted to the empirical reality of value chains of used goods and materials. The nature of the material stream constituting the supply of used goods means that value production cannot be additive as in the "value-added" chain conceptualization of international trade and industrial organization (Gereffi et al. 2005). Value creation for used things as they move from one site of value production to another is instead a matter of connecting different regimes of value to *extract* value from things which have lost their worth in one context (Norris 2012; Crang et al. 2013).

Identifying value extraction as a mode of value capture still does not specify the mechanisms whereby value is created at different sites along a value chain. In practice, it takes quite a bit of work to create a material stream that consists of used books or used clothing to the exclusion of other used things. The infrastructures of collection of used goods tend to generate a supply comprising different types of objects. Moreover, used goods are materially heterogeneous, having (usually) gone through (at least) one consumption cycle, rather than standardized through mass production processes. Valuation of used goods involves a type of production which I call s*ubtractive production*. Subtractive production involves the labor of ridding and displacing which creates sorted, aggregated, and classified goods from a heterogeneous material stream. This type of production is not a purely creative process whereby new things are created from abundant resources; it is, instead, contingent, messy, wasteful, and ad hoc. It is also not simply extractive, in the sense discussed by Crang and coauthors (2013). Although some high-value goods are extracted from the material stream, the lower-value items that remain are made valuable through rounds of sorting and ridding. This successive subtraction of items which are understood to be unsuitable in a variety of ways is the central mechanism for the valuation of used goods when considering the ecology in which these items move, from collection through various points of sale.

Understanding the work of ridding as a type of productive labor is at the center of understanding valuation of used goods. Very much in this spirit, Herod and coauthors (2014) have stressed the importance of considering the nature of labor processes in understanding value transformations of goods in recycling or secondhand networks. It is crucial not to think of goods as already produced and waiting to be valued. Valuation is not simply a process that previously produced, finished objects must undergo (see also Gregson et al. 2010). Markets for used goods are not simply the distribution mechanism for goods that were produced in distant processes. Rather than being analytically prior to valuation, production of the goods being valued—through physical manipulation of material components or displacement in space—is central to the valuation process.

A view of valuation which is able to encompass instances in which value is produced through ridding and subtractive processes requires what Jackson (2013) has called "broken world thinking." As Jackson suggests, this mode of thinking "asks what happens when we take erosion, breakdown, and decay, rather than novelty, growth, and progress, as our starting points" (Jackson 2013: 221). In so doing, broken world thinking focuses on the processes of "breakdown, dissolution, and change" as well as the accompanying, ongoing activities of repair and restoration that allow for the maintenance of stability of social worlds and systems (Jackson 2013: 222). While it was developed to understand information technology systems and the world they inhabit, broken world thinking provides an important orientation in thinking about market processes. Geographers Berndt and Boeckler observe that marketization is a "deeply ambivalent endeavour … about establishing *and* severing linkages … incorporating *and* expelling places, people and things" (2010: 566). This ambivalence of marketization is reflected in the ridding, categorizing, and sorting that makes it possible to create value in a market for used items.

Broken world thinking urges us to think beyond valuation processes that happen in a single market or in a single moment of valuation. Because value is created in part via heterogeneous processes of repair, recovery, and salvaging, and marketization is characterized by ongoing erosion, breakdown, and decay, wide-ranging actors and organizations are enlisted to deal with these various aspects of the process. We are obliged to think of the work of production as taking place in a "diverse economy" (Cameron and Gibson-Graham 2003) where practices officially recognized, counted, registered, and so on as "economic" are supplemented by other practices which, though not usually recognized as part of a legitimate account of economic activity, are essential to the functioning of markets and value chains. Following Hutter and Stark (2015), we might conceive of market valuation as a moment of stabilization within a greater context of unstabilized, often conflicting, processes. Broken world thinking helps us look at valuation differently by zooming out from the moment at which value is determined to the processes in which those moments are themselves situated. An ecological view allows us to see the overflow inherent to markets and to think in terms of excess rather than scarcity. We can think about how markets are connected to one another, and in a fundamental way about the conditions that make particular performances of value possible. The broken world thinking approach to valuation allows us to consider both production of value and production of excess within an ecology of materials, flows, and social structures.

Thinking ecologically with the broken world approach therefore helps contextualize existing sociological and socio-technical accounts

of valuation. While it is undoubtedly true that symbolic and technical mechanisms are at work, it is unavoidable that material processes of ridding, wasting, categorizing, and sorting not only contribute to, but often underpin those symbolic and technical mechanisms. The value of used items is only temporarily stabilized through a variety of sorting and classification processes which rely on a subtractive logic of ridding to qualify goods. These are the situated moments that valuation studies have largely been concerned with explaining.

The ecological approach demonstrates that trajectories of value are even more dynamic, iterative, and non-linear than as described by Thompson's (2017) rubbish theory. Ridding, as described in this article, is a practice which is done to items which fall within the realms of what Thompson has called "transients": consumer goods whose (exchange) value decreases over time and which have limited lifespans (2017: 25), as well as "rubbish": objects of zero and unchanging value which exist in a "timeless and valueless limbo" (Thompson 2017: 27). Thompson was more interested in explaining the phenomenon whereby kitschy or undesirable consumer goods become durables than he was in examining in any great detail the mechanisms at work within the categories of transients and rubbish. But there is not just dynamism *between* categories of transient, durable, and rubbish; there is a great deal of value transformation *within* categories. Looking closely at the dynamics of used goods makes it clear that the value of transient goods is not constantly decreasing. There can be peaks and increases in (exchange) value, even while goods never actually enter the category of "durables." Taking the pragmatics of ridding into account also problematizes his conception of "rubbish": far from being valueless, even the most mundane objects can be valued in multiple different ways as they travel through different spaces and encounter different judgment devices and evaluative schemes. An increase in (exchange) value does not make something a durable, and something does not ever necessarily need to have zero value or be "forgotten" in order to increase in value.

	Value	*Waste*
Heuristic	Market, value chain	Ecology
Location	Situated	Ongoing
Structure	Linear	Non-linear
Mechanisms	Social, socio-technical	Ridding, subtractive production
Aesthetic	Cult of the new	Broken world

Table 1. Value and waste paradigms for understanding valuation. Source: Author's own

In sum, the ecological approach presented here explains valuation as a process which is ongoing rather than situated; as non-linear rather than as part of a linear process from production through an endpoint of waste; as part of a broken world rather than in terms of a cult of the new that applies best in western capitalist contexts; and as intrinsically connected to particular methods of production. In the case of used goods, this is a process of *subtractive production*. Table 1 summarizes the distinctions between the value and waste paradigms for understanding valuation. In the sections that follow, I present the outlines of an ecological approach for understanding valuation of used goods by considering the case of used books in England.

Data and methods

The data for this discussion are drawn from a 14-month long qualitative study of the valuation of used clothing in England, wherein I traced flows of used clothing from points of collection through points of domestic resale or export. Using ethnographic (participant observation and observant participation) and interview data, the research was meant to investigate valuation of used clothing, but this is an article about used books. Early in the research, I realized that it is non-trivial that clothing is only one of the things exchanged in the spaces I was visiting. The infrastructures of collection mean that used clothing and used books (along with other types of used household items) occupy the same ecology.

My research was based in a medium-sized city in the South East of England. I volunteered in four charity shops in the city where I lived, totaling nearly 200 hours of participant observation. I conducted 26 formal interviews with a variety of actors involved in the buying, selling, and regulation of used clothing in England, as well as numerous informal (and not audio-recorded) interviews in the course of participant observation and observant participation which form part of the field note record. Formal interviews were with managers and employees from other charity shops, with representatives of local authorities (city and council authorities) responsible for the collection and management of waste, and with individuals involved in the collection and circulation of used clothing and other used goods as part of various local organizations. I interviewed owners or employees of six textile recycling companies, and traveled to visit five of these facilities. Taken together, these six textile recyclers covered most of the area of England, as their collection reach spanned the country from its northernmost to southernmost areas. During site visits I was shown the labor process, machinery, and warehouse spaces necessary for creating value from collected used clothing (and books, and other items).

The four shops I volunteered in represent different types of charity shop models present across England and the United Kingdom (UK).

Cat Charity is a local cat rescue charity with just one shop location, run by a small cadre of regular volunteers and no paid managers. I spent the most time volunteering in this shop, and I generally worked with the same two or three women each time I went in. Children's Charity is a regional charity with a few dozen shops and a highly professionalized managerial system, and a volunteer staff that was large enough for the managers to need to display a printed-out weekly schedule of who was scheduled to come in and for which hours. Health Charity is one of the UK's larger charities with hundreds of shop locations across the UK. In my time there I always worked with one of two managers and a fairly limited group of several regular volunteers. Pet Charity is a regional animal sanctuary with a few shop locations, each of which has one paid manager and a small handful of volunteers. The fifth charity included in the discussion below is Hospice Charity, a local charity with several shops spread around neighboring towns.[1] While I did not do participant observation here as a volunteer, I did spend a day shadowing the retail manager as she traveled around the region to visit her shops, and an additional day with the manager of one of Hospice Charity's shops as we traveled to meet with a textile recycler at his facility several hours away. I also visited Hospice Charity frequently as an "observant participant," taking field notes about discussions or conflicts among the employees and observing customer dynamics. This method of observant participation at dozens of other charities complements the participant observation data I was able to collect during my time as a volunteer over the course of 14 months at the four shops I mentioned above.

Used books in England

The "supply" of used goods is highly heterogeneous, as people discard various types of items with varying degrees of usage. As they travel through a variety of different spaces of exchange, used books can be sold alongside used other used goods or separated off into more specific niche markets. The social frameworks and socio-technical scaffolding that guide value judgments in markets for new things are

[1] All hospice charities are local, as their cause is always to support a specific (and thus always tied to a particular location) hospice's operations. While in practice they operate in the same way as other local charities with just a single or several shop locations (in contrast to those charities with a larger regional or even national presence, which tend to use centralized warehousing and because of the greater volume of goods flowing through their stores can support more targeted retail operations, such as "vintage" shops with collected items), hospice charity retail is treated by the Charity Retail Association as a separate category when data about sales are aggregated and reported. This is because hospice shops often do very well due to the emotional connection people are thought to have to their local hospice, meaning that hospice charities do not usually face the same difficulties soliciting donations that other charities complain of.

secondary to the mundane and everyday ways in which used books are sorted, classified, and moved into different spaces to be made part of different material flows. Used books are remade through sorting and classification as certain types of goods, which are evaluated with various modes of valuation. The ecology of used book exchange stretches across sites from charity shops to waste paper recyclers, with a number of different intermediaries and multiple modes of valuation.

Before the shop floor: rejection

When charities collect goods, they are taking advantage of people's desire to downsize and rid themselves of excess or unwanted items. As a result, used books and used clothing are very often collected in the same infrastructures of charity shops or collection banks (the large metal bins that are often located in the parking lots of grocery stores alongside other bins for recycling other types of goods or materials). These material streams are often not only full of clothes and books but a great variety of other household items, including toys, games, crockery, decorative items, small electronic devices, furniture, gardening supplies, and so on. Used goods must be excavated, carved out of these material streams which consist of a great variety of unique items, and aggregated; only then can they be known in particular ways as having particular qualities which position them in particular value regimes. This is done through multiple rounds of ridding and expelling from the "calculative space" (Callon and Muniesa 2005: 1231).

The first of these rounds is at the moment of collection. A lack of space is quite often the biggest factor determining what, and how much, needs to be rejected. At Cat Charity, where the shop location consisted of one room for display and a curtained-off storage and sorting area, plus a storage garage out back, officially books were not sold because they take up too much space. The exception to this rule was children's books, which were displayed for sale on one shelf among other children's toys and games, and stored in the stockroom on one shelf. The policy prohibiting sales of books did not, however, prevent people coming in often with boxes of books which they wanted to leave, or with books which were discovered only later when bags were opened, and which therefore could not be refused. The workaround at Cat Charity, then, was that when books were received they were displayed on the counter to be given away or taken for a donation. I was told that it is better to get 20p for a book than nothing at all.

It is not only space constraints that motivate ridding processes; ridding also helps charities cultivate a particular image. Given the strong culture and infrastructure of charity shops in the UK, there is a great deal of competition among the charities as people have a number of choices as to where they can bring their used items. It is therefore important for charities to strike a balance in their message to potential

donors, encouraging them to bring everything they have to give away, but not causing the volunteers to get bogged down in poor-quality items that they will spend hours sorting and then will not be able to sell. Volunteers often discuss the difficulty of encouraging the "right" kinds of donations: "good" things which will sell, raise money for the charity, and which in the process will make the shop attractive. In this sense the production of value begins with the cultivation of supply. Even in the shops that attract the "best" goods (those with the highest resale value), most of what is brought in as a donation is rejected. In most cases, if not all, only a fraction of what is brought in as donations is ever set out for sale.

When items, desired or not, have been accepted, another set of rejection criteria is employed in sorting processes. At Cat Charity, when books were damaged or written in, whether they were children's books and therefore suitable for official sale, or books that were not to be sold officially (novels, cookbooks, travel guides, curiosities of all kinds), I was instructed to "bin them" and told that we should not sell things that are soiled—and apparently we could not give them away for free, either. Books that were set out to be taken, like other items that were for sale, were not only meant to raise money for the charity but were also used to convey a sense of propriety and attractiveness.

At Children's Charity, a larger shop, books are given their own section of the sale floor. Before they are set out for sale, however, they get subjected to a physical test similar to that employed at Cat Charity, which ensures that the stock on the sales floor is relatively uniformly decent-looking. If books are worn (for instance if the outer edge of the pages are dirty or if the cover is tattered or damaged) or if they have writing or a stamp in them (from, for instance, a school library to whose collection a book used to belong), they are set aside into the plastic bag that will be passed along to a book recycler. This store has a vintage section, which in turn has a separate section for vintage books, but even for a book to qualify to be displayed there, the book should not be falling apart, and it should be a first edition. If they pass the physical test, books are set out in their own special area. Volunteers are not required to make any sort of evaluation of a book based on its content, or its potential to appeal to customers.

Before the shop floor: extraction of high-value items

Alongside subtractive ridding processes to eliminate undesirable items from the material stream, potentially high-value items are also being extracted out of the material stream to be qualified in different ways. Shop managers must either have the knowledge themselves to evaluate potentially higher-ticket items, or they outsource this task to specialists or to technical support like software. I observed both of these strategies at Hospice Charity, a local charity with several shops spread

around neighboring towns. On a day when I visited several Hospice Charity shop locations with Sandra, the manager of the charity's retail operations, she spent some time instructing the shop managers what they should be setting aside for a special event that she is going to have for the moneyed, high-class hunting crowd that lives in the countryside near this shop. She called it her "hunting sale" and told her managers to set aside large coffee table books for this event. Though she knows that these people "won't walk into a charity shop," through a friend who is involved in hunting in the region, she knows that these people will attend a glamorous charity event to buy hunting memorabilia, furs, and nice coffee table books. This event was a chance for Sandra not only to raise money for the charity but also to find the "right market" for things that she could not sell in her shops otherwise, like fur.

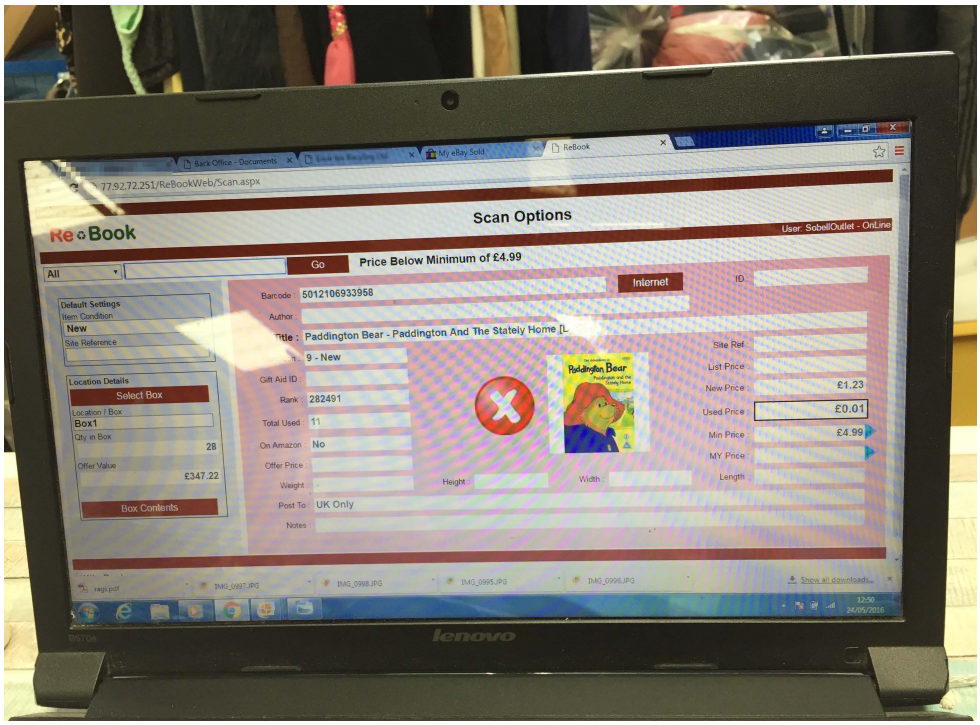

Figure 1. Hospice Charity's book-scanning software rejects a candidate for online sales.
Source: Photo by author.

As another part of their extractive production process, Hospice Charity scans the barcodes of books to determine which ones should be sold online for a higher price than could be asked in the shop. This business model is designed to extract the highest amount of value as possible from the books that come in as donations. Tucked away in the sorting room of her shop, a shop manager demonstrated to me how the software for scanning and selling books works. She showed me

stacks of books under the desk holding the computer and pointed to additional stacks of books on the floor in the stockroom a couple of meters away, covered with a sheet. All these books were waiting to have their barcodes scanned. If the software tells them that the profit for that book, taking into account shipping costs (which the software can calculate based on the information gathered from the ISBN code[2]), is greater than £5 (the limit that this charity has chosen to set), that book will be listed to be sold online (see Figure 1). The books listed online are set aside in a large plastic tub, on top of some shelves, to wait. When the book sells on Amazon, the software sends them an email and even generates a shipping label. If the software determines that a book will generate less than their £5 profit limit, it goes out onto the sales floor in the shop. The manager showed me how to scan in a boxed set of children's books as an example. Although the item cost over £8, the profit threshold of £5 takes into account shipping price. In this case the item's weight meant that the shipping costs were too high to bother selling it online.

On the shop floor: qualification at point of sale

Their heavy culling strategies, based on material qualities, meant that Children's Charity could price books by using a "scaffolding" device borrowed from the items' first life as a new book: by checking the suggested price on the cover and charging about 25 percent of that amount. But after passing the first rounds of inspection, books are not just sent out to the shop floor and left there until they are sold. Most charity shops have a "culling" system that allows them to systematically employ periodic ridding mechanisms that ensure that no items linger unsold on the shelves too long. For the purposes of keeping track of how long stock has been out on the floor, all items are marked with the date of their eventual culling on their price sticker before they are set out on the shop floor. Shops with a higher volume of turnover[3] had shorter "cull-by" periods, usually two or three weeks; smaller shops tended to use a cull-by period that allows goods to sit out for a month or more. When I was being given my introduction to a Children's Charity shop, one of the managers pulled out a book to show me the date written on the price sticker, which is always two weeks from the day the book is set out on the shop floor. In this case the date on the book she pulled at random off the shelf was long past. She explained to me that though this one should have been long gone,

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[2] The International Standard Book Number, a book's unique numeric commercial identifier.

[3] Turnover is not just a function of the volume of donations a shop gets; charities with a network of shops often employ stock rotation systems, where unsold goods are sent to other shop locations according to a predetermined schedule. In this way shops can display "new" stock, even if the items are not "new" donations.

sometimes you can leave it longer because it is better to have things that are overdue for culling than to have bare shelves. When there is more supply, however, books should not sit for more than a couple of weeks unsold.

It should by now be clear that multiple previous rounds of ridding allow for the use of qualification strategies that resemble those in the market for new goods. It is at this point that valuation processes for used books also resemble processes described for higher-value used goods, like antiques or vintage clothing. As with antiques, cues that indicate an item's provenance help make it appear valuable (Bogdanova 2011). Sandra at Hospice Charity tells me that she has an arrangement with a local auction house whereby items that are neither sold nor collected by the people who put them up for auction are given to the charity. She playfully tells me that auction tickets help items sell, and we laugh when she describes how "old books that aren't worth much really" that were not bought by collectors on auction are attractive to people in the shop simply because they have the auction tickets on them! The ticket conveys a sense of the quality of the book, whether or not this quality reflects its actually attainable economic value (similar to Thompson's example of a low-status fireplace raising the appeal and market value of a renovated house [2017: 67]).

Beyond the shop floor: parallel exchange

Alongside the official sale of donated goods, charity shops tend to be places of many kinds of informal exchange and multiple channels of circulation which extend outside of the space of the charity shop. Many studies of used goods use a value chain approach as a heuristic for tracking the flow of objects, but the ecological approach shows that value production is more diffuse—iterative, circular, spread out—than linear. One common practice among charity shop workers was to speak of the shop's stock of books as a library. One of the managers at Health Charity told me that I could borrow books from the shop and bring them back once I'd read them, or at a pound or two apiece, I could "just buy them and re-donate them, they're so cheap!" At Cat Charity, books were also often quite freely distributed among volunteers, who were encouraged to take them away and bring them back at will. At Pet Charity, the manager explained to me that children's books are some of their best sellers, because it's the type of thing that people always need more of. Some people even buy them and then donate them back when they've finished. It's like a library, she said, just without the late fees. In this way, books move through multiple cycles of exchange which are temporary displacements rather than linear transfers from buyer to seller.

In addition to this library-like exchange with the shop itself as a hub, used items that come in as donations to charity shops are sometimes sold or exchanged in settings outside the shop. At Cat

Charity, though books were not sold officially in the shop, books were nonetheless sometimes collected and sold via alternative channels. A local fair in the springtime proved an opportunity to sell some things which were not usually sold in the shop, books included. In other instances, amassed books were sold by the box to local auction houses (usually ones that had agreed to waive the fees for putting goods up for auction). Auctions—both online auctions like eBay or local auction houses—were sites for selling both high-value items as well as low-value items that had collected in significant numbers and not sold: boxes of books, boxes of plates, boxes of stuffed animals, anything that had accumulated. After items had been displayed in the shop for some time without being sold, they were often taken out to the garage out back to be stored until enough of that type of thing collected and they could be taken to auction and sold off. Through these processes of storage and aggregation, items unsold in the shops did not become zero- or negative-value waste, but were instead re-qualified in other contexts.

Beyond the shop floor: professional recycling

Moving beyond the space of the charity shop, an ecology of markets emerges. Individual moments of valuation are sustained by the existence of contiguous markets and spaces into which unwanted materials or goods can be offloaded. If a used book is rejected first by its original owner, and then by charities, it either ends up as waste—going directly into the garbage as at Cat Charity—or is sold onward to a book recycler. Smaller charities can get away with putting unwanted items, like damaged books, into the garbage, because they generate smaller amounts of waste in general. For instance, they may pay per tip that they fill per month, and even higher rates of ridding would not cause them to fill up more than one tip. Their costs associated with generating waste are in this sense not prohibitive. At larger charities, however, larger volumes of stock meant larger volumes of waste generated and paid for. I was told to try to put as much in the recycling bags as possible (for cardboard, paper, etc.) because it costs less to dispose of those than a bag of rubbish. It is a better solution to avoid the cost altogether, by segregating books and selling them onward to recyclers. When books are unsold after their designated time period in charity shops, they are taken off the shelves, bagged, and sold onward, together with books which did not make the cut to be displayed on the shop floor. Unsold books can be bought by the textile recycler who buys unsold clothing from the shop, or sold to a specialized book recycler.

Textile recyclers often collect books from charities along with clothes, and sell them on to book recyclers. Books can accumulate in huge amounts, even as a by-product of the main activity of used

clothing collection. A London-area textile recycler who collects from charities within a 100-mile radius of his warehouse told me that he collects and processes about 40 tons of books a week (alongside their main business of clothing—180 tons per week—and 30 tons of shoes, 12 tons of bric-a-brac, and 2 tons of cardboard). The textile recycler can take on pre-scanned batches of books because the book recycler that he works with sells all books, even those that can only be listed for a penny. The value production model employed by the book recycler for selling books therefore has an effect earlier, at the point of collection, on the decision of the textile recycler with regard to what "sorts" of books he can collect. It should be noted that the "sort" of books is quite literal here: the sorting processes employed on a material stream have the effect of making it a particular type of product. Sandra at Hospice Charity tells me that the only problem with her value-extraction sales model, relying on her Amazon barcode scanner, is that she can't get much at all—only about 5p for a bag of 30 books—for the books that she sells on to a book recycler because they know they have been scanned. Health Charity gets more, selling their unsold books to a firm that buys them for 5p per kilo.

Sometimes book recyclers work independently as opposed to on a contract basis with charities. One day when I was working at the till at Children's Charity, a man in his late 20s or early 30s came in with a rolling shopping bag. He introduced himself as a book reseller and asked us if it was okay if he scanned the barcodes of books. The manager allowed him to do it. After a while he came back around the corner from the book area with a stack of about ten books. When I asked, he explained to me that his barcode scanner was connected to the Amazon product database and shows him the price on Amazon—a mobile version of the software that I saw Sandra's managers using at Hospice Charity. He said that he spends most of his time buying books, traveling from one area to another. He told me that he is surprised that I don't see more people doing the same, because there is quite a lot of money in it. It was worth it for him to buy books at the prices we were selling them for at Children's Charity (£1 to £2.50) but at the charity down the street, the books are £5 each and it's not worth it. Thanks to his socio-technical device, this book reseller does not have to have specialized knowledge about the desirability of individual books; he can instead rely on price data to calculate whether he can make a profit on particular items. When I mentioned this incident to Sandra, she said: "Naughty! He wouldn't get anything out of us! We scan them all first." Her stores' extractive methods for books would likely mean that such an entrepreneur would come out empty-handed, but where other shops do not use this extractive method, there is room for such business opportunities.

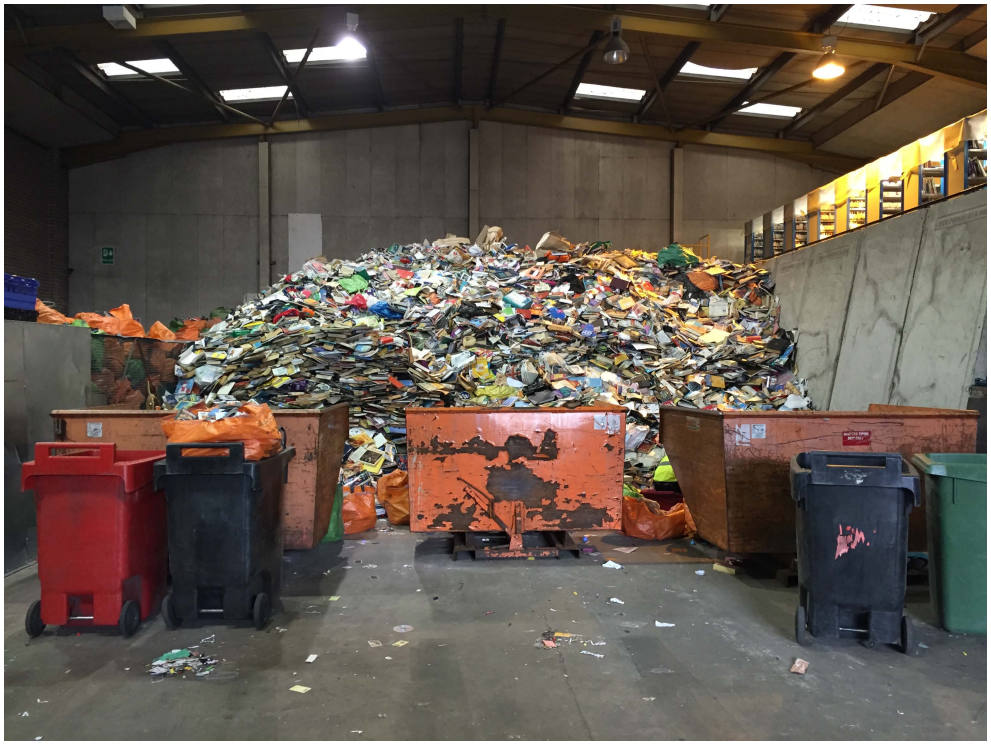

Figure 2. Books await sorting, workers crouching in high visibility vests at the base of the pile (one can be seen behind the tip on the right). Rejected books go into the orange tips. Shelves of books awaiting sale can be seen at upper right.
Source: Photo by the author.

One of the UK's largest textile recyclers also collects books (independently via collection banks, not from charities) and sells them themselves on a massive scale to Amazon. At their warehouse, I witnessed the high-value model of value production for book sales in action. In this model, the first culling is aggressive. In a warehouse separate from the one where clothing is processed, three workers in high visibility vests crouch at the base of a pile of books that is about 5 meters high, tossing books into the tip behind them—each worker has his/her own tip behind her—that do not meet cosmetic criteria for resale (see Figure 2).

The books that pass the first, cosmetic, test are placed into a sack (like an IKEA bag) and transported across the warehouse to the staging area for the rational/technical stage of the sorting process. Here, as at the charity shops, workers use software that calculates the books' sale prices on Amazon. Then the books will go into dozens of rows of shelves, stretching across two stories of the warehouse, and wait to be sold. This is the physical bookstore behind the virtual bookstore on the Amazon marketplace, just like the plastic boxes atop

the shelves at Hospice Charity, or the books inside the rolling bag pulled by the lone book reseller who searched the bookshelves at Children's Charity.

2017 UK domestic mill £ per tonne ex works	January	February	March	April	May	June
Mixed papers	69 - 79	76 - 85	80 - 105	40 - 52	45 - 60	55 - 75
Old KLS (cardboard)	80 - 95	88 - 100	98 - 110	80 - 90	90 - 110	115 - 130
News and pams	80 - 90	90 - 100	100 - 108	80 - 95	82 - 95	88 - 98
Over-issue news	115 - 122	120 - 127	125 - 135	112 - 122	115 - 122	120 - 128
Sorted office waste	162 - 168	164 - 169	165 - 174	166 - 175	166 - 175	165 - 175
Multigrade	160 - 165	160 - 165	163 - 168	164 - 170	163 - 170	160 - 168
Light letter	165 - 175	170 - 177	175 - 180	175 - 180	175 - 181	175 - 180
White letter	225 - 230	225 - 230	225 - 230	220 - 230	225 - 233	225 - 235

Figure 3. Waste paper prices for the first half of 2017. Source: https://www.letsrecycle.com/prices/waste-paper/, accessed May 5, 2017.

Book recyclers buy unwanted books from charities or collect them in special collection containers at Household Waste Recycling Centres or in recycling banks (for instance, in the parking lots of grocery stores or on property owned by local authorities). World of Books is one book recycler that specifically works with charities to collect books that they cannot or do not want to sell. On their website, World of Books reports that they "recycle 2.3 million books a month" (World of Books 2017). This is the equivalent of 12,500 metric tonnes per year. The books get sold on Amazon (or similar marketplaces like AbeBooks or eBay), exported as books, or sold as paper of various grades.

If a book cannot be sold as a book by a book recycler, it then ends up on the commodity/recycling market. Book recyclers must also deal

with their own waste from their sales processes, and World of Books is no exception, reporting on their website that what they cannot sell on their various online marketplaces or export "to developing countries to assist in education and enjoyment," gets "recycled into low grade cardboard and other materials to be re-used" (World of Books 2017). That market is itself specialized, with different prices for different types of paper. According to the index of prices maintained at letsrecycle.com, white letter paper is the most valuable grade of waste paper, and consistently fetches about 3 to 5 times more per tonne as does the least valuable grade of waste paper, "mixed papers" (see for example recent statistics in Figure 3). Thus there are multiple routes via which used books end up on the commodity recycling market to be sold as waste paper. Even then, the type of waste paper that a certain item can become—or whether it can be recycled or reused at all—is dependent upon the material parameters of the particular item (what kind of paper it is, whether it is wet or soiled) and inherent limitations of paper fibers which constrain the "ongoingness" of a used book as a re-produced commodity (Herod et al. 2014: 428).

Discussion and conclusion

Considering ridding as a fundamental mechanism of a used-goods economy brings valuation into focus as a part of ongoing flows and processes. While individual moments are indeed situated in particular places and spaces and embedded in particular social realities, this is not the entire story. The ecological approach compels researchers to think about access to resources and about the conditions that allow certain actors to manipulate resources in particular ways in temporally and spatially adjacent and overlapping valuation processes. Furthermore, I have urged for a focus on production in studies of valuation. In this case I have discussed subtractive production, but the approach could be extended to all types of production (industrial, lean, or just-in-time, for instance). By way of conclusion, I propose that this article has demonstrated how valuation is ongoing as well as situated; that studies of valuation should not only be attuned to waste but to multiple forms of waste; and that studies of market making, like this one, are important counterparts to studies of market functioning.

Ongoingness of valuation

Beckert and Aspers (2011) note that most studies of valuation in markets to date have been empirical studies of wine, art, and finance. With an eye to developing a "general sociological theory of valuation and pricing of goods," they ask if the findings of the studies are generalizable, or if "valuation processes differ systematically in different types of markets, and if so, how?" (Beckert and Aspers 2011: 31). The answer proposed in this article is that moments of valuation

are themselves situated in larger ecologies, which expand beyond single instances of valuation in particular markets. Part of telling this story means considering the realities of production which make the moments of valuation possible. The ecological approach sheds light on a number of questions that are more difficult to answer when valuation is conceived of as a process that happens when production is already complete. Accounts which seek to situate "moments of valuation" by describing the social or socio-technical processes through which the value of goods can be agreed upon tend to abstract away from production processes, and take for granted the existence of the "x" in "a market for x."

With this in mind, we can situate economic sociological knowledge about valuation of spectacular and expensive goods, like wine, contemporary art, antiques, or financial derivatives. Before impressive profits can be derived from the exchange of these goods, they must be turned into knowable and standardized goods not only through the work of material infrastructures but also through the work of a great deal of human actors whose job it is to do the preliminary sorting, categorizing, and arranging of materials and things that make the astronomical profits from the exchange of objects possible elsewhere. Creation of those things that are attractive, desirable, or even just knowable involves a lot of moving around of unchosen, unwanted things and materials. Wherever it is possible to exchange highly standardized objects—used goods or new goods—there is a rich infrastructure that refers not only to the immediate environment of exchange but also to one that spans the globe and reaches back to primary production markets.[4]

Multiplicity of waste

Focusing on ridding adds nuance to Thompson's (2017) hypothesis that the exchange value of transient goods decreases over time and that so-called "rubbish goods" have zero value. Within these categories there is a great deal of value fluctuation. Thompson is more interested in the social control of value and the ability of individuals and groups with the most power and capital to determine which goods have the most (economic) value, than in the value of rubbish per se. Despite recognizing the variety of evaluative schemes or tastes (the multiplicity of "blinkers" (2017: 144)) operating within one society, Thompson insists that "there is only one market" (2017: 65). The case of used books has shown this to be not entirely true. It is true that there are higher-value markets for antiques or collectibles—the more durable

[4] This is true even in the case of financial markets. See for instance Çalişkan's (2010) ethnography of the global cotton market for an ecologically-spirited account of how the farming of cotton is connected to the trading of cotton futures in global stock exchanges.

types of used goods—but the operation of these markets depends on the operation of an ecology of neighboring markets. These flows are not infinitely realizable: there are limits to the "ongoingness" of waste which derive both from material limitations of remaking goods and from the logic of profitability under capitalism (Herod et al. 2014). In this article the logic of profitability has been shown to be not just a single, overarching logic, but a multitude of localized logics which are contingent upon the ways in which the "rubbish" from one situation of valuation will be used in the next one.

Making markets and valuation possible

Finally, the ecological approach brings into focus certain fundamental questions relating to the study of markets. One of these is: "what should economic sociologists explain when they study markets?" (Gemici 2012: 107). The most common focus of explanations has been the question of how markets work, and specifically how it is that the value of goods is agreed upon through the coordination of disparate market actors. As I have described throughout this article, explanations have tended to be social (overcoming of uncertainty; building relations of trust) and socio-technical (economic ideas help shape, not just explain, markets; the role of infrastructures and judgment devices is key).

This paper contributes to a body of literature concerned with the preconditions for the functioning of market exchange rather than solely explanations about how certain markets work (see for example Kjellberg and Helgesson 2006, 2007; Vatin 2013; Rona-Tas and Guseva 2014). Rather than asking how a market for a certain type of good works, I have argued that in order to avoid obscuring essential features of the world, it is equally necessary to ask what conditions are necessary for the market to operate in the way it does. This is not a metaphysical issue, but rather one that seems almost too simplistic to include in a serious study of valuation and markets. We might ask questions such as: What is the market in question made of? How did those elements get there? In the case of Amazon.com: How do all these books end up in an online marketplace? In the case of the global cotton market (Çalişkan 2010): How is cotton made into a global commodity, traded on the stock exchange? These are supply-side questions which have been obscured by the demand-side explanations of valuation produced in recent decades, but they are an essential part of the story.

By asking these questions about markets in which we have assumed production processes as prior to valuation, economic sociologists will be able to gain greater insight into the way in which markets are created and sustained. For instance, with regard to the market for apparel, the relevant question for economic sociology has been: if all

goods are created equal, why is one sweater worth more than another? The widely accepted answer is that one sweater has greater symbolic value than the other due to the status of the people who produce and consume it (Aspers 2009). But this, in part at least, inverts reality. To take the example of two mass-market clothing stores, it is the organization of production (just-in-time stocking, mid-season production of apparel, responding to the latest trends, and customers' actual buying patterns) that allows Zara to maintain a higher-fashion status, and attract higher-status customers, whereas Gap, producing most of its clothes before the season starts and less able to create apparel in response to observed demand, currently cannot (Fraiman et al. 2002). Retailers have figured out the importance of process innovation, and it is time for us to adjust our thinking as well. The lesson of ecological thinking is that sociologists who want to understand value should stop assuming that all goods are created equal, concentrating only on symbolic value, and start asking how goods are created differently. In this way we will better understand how material production processes make particular social and economic outcomes possible.

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