TRANSFORMATION AND THE SATISFACTION OF WORK

Andrew Sanchez

Abstract: This article suggests a new conceptual framework for understanding why some types of work are experienced in more satisfying ways than others. The analysis is based on research in an Indian scrap metal yard, where work entails disassembling things that other people no longer want. In spite of the demanding conditions of the labor and the social stigma attached to it, employees express satisfaction with the work process. This observation raises questions about theories of labor, which see satisfaction as arising from work that is creative, skilled, and task-based. The article argues that transformation is a social process that should be used as the primary analytic for explaining work satisfaction. Theories of creativity, skill, and task are secondary analytics that describe subsets of transformative action.

Keywords: alienation, creativity, satisfaction, skill, task, value, work

When I first met 33-year-old Dipesh in the Indian city of Jamshedpur in the spring of 2014, he was employed in a small family-owned scrap metal yard called Lohar Enterprises. Dipesh had worked in the yard for only two weeks, having been previously employed for many years in a local business that traded in scrap plastic. Like many people new to their workplaces, Dipesh was anxious about the unfamiliar demands and relationships that the job would involve. He had reluctantly left his previous work when his employer reduced his hours in the face of financial problems. As we squatted on the ground of the metal yard one afternoon, surrounded by broken bicycles, tin cans, and assorted detritus, he told me that he missed his old job. Although employment in the scrap plastic industry had not paid well, he enjoyed the work because the trade was complex and took many years to master. Sitting amid mounds of



scrap metal, he took the time to illustrate this for me by selecting several pieces of plastic waste from a nearby pile of rubbish: an empty water bottle, a broken CD case, a child's toy boat, and a carrier bag. Over the course of our lunch break, Dipesh provided me with a careful tuition in the manual and entrepreneurial skills of the scrap plastic industry. He described the material differences in the various plastics' density, hardness, and opacity, and explained how each of these materials could be processed for future use, where in India they were most sought after, and what their market value was. He asked me to handle the materials myself to develop a tactile sense of their properties before testing my knowledge of their prices with questions that continued throughout the afternoon. Dipesh was a likable character with the charisma of a genuine enthusiast. Being a newcomer to scrap metal, he was worried that the trade would not be as interesting or demanding as plastic.

Dipesh was born in the metropolis of Kolkata, into an upper caste but extremely poor family of textile workers. When he was in his early teens, his father died, and the young boy was forced to migrate to Jamshedpur in search of work. Settling in one of the city's slums, Dipesh worked as an errand boy in a brothel, followed by a brief stint as a petty criminal, before finally finding his place in scrap plastic. He had married his 23-year-old wife five years earlier and was now raising a two-year-old daughter. As a high caste urban slum dweller from the big city, he initially felt distant from his colleagues at Lohar Enterprises, most of whom were low-caste migrants from villages. He was one of the few employees who could read and write, and the only one who could understand English. As a member of the high Brahman caste, he was also thrust into new situations of ritual pollution due to the metal work. However, he saw his transgression of these restrictions as another expression of his cosmopolitan virtues. Dipesh's troubles with the perceived provincialism of his colleagues never truly went away. However, his relationship to the work tasks themselves changed a great deal in the weeks following our discussion about plastics. As Dipesh became part of the yard, he found that he experienced the same type of satisfaction in disassembling and classifying metal as he had previously found when working with plastic.

Scrap work at Lohar Enterprises demanded a knowledge of the material properties of a wide range of metals; an understanding of their respective market values; a grasp of the interpersonal and entrepreneurial skills associated with the mercantile aspects of the business; and the technical skills required to disassemble the discarded metal objects that constitute the bulk of the yard's raw materials. During my fieldwork, such tasks were engaged with positively by employees, who generally found the work process engaging and rewarding, even though the labor was poorly paid. In this respect, the Lohar Enterprises scrap yard of Jamshedpur is a strikingly different environment compared to the large factory shop floors that I have previously researched in the same city (Sanchez 2016).

For example, on the shop floor of the Tata Motors plant, where 11,000 assembly line workers construct heavy goods vehicles, employees routinely express dissatisfaction with their experience of the work process. They are uninterested in the production regime and material products of their labor, and they generally opt to work less attentively and strenuously when not being overseen by their supervisors (Sanchez 2012). By comparison, scrap yard employees like Dipesh are generally absorbed in their work regardless of whether they are being supervised. They speak positively about their experiences of learning and using skills, and they like to find new ways to improve upon the work process.

I was not surprised that poorly paid scrap workers in India might enjoy taking things apart and sorting their components. My experiences in the scrap yard taught me that I also found it satisfying to disassemble things. However, as I tried to interrogate the satisfying feeling of taking things apart, I discovered that it was similar to the feeling of building things. It was also similar to the sensation one might have when solving a puzzle. It seemed that there was something common to these processes that made them satisfying. In an effort to identify what it was, I applied the analytics of creativity, skill, and taskbased work. It struck me that each of these analytics was partly right in how it answered my question, but none was entirely so. This led me to believe that there is a basic process underlying those things that could be used as a 'primary analytic'. This article proposes transformation as that primary analytic, while creativity, skill, and task should be regarded as 'secondary analytics' that describe subsets of transformative action. The argument is therefore not posited in opposition to those other analytics; rather, it is a discussion of what lies beneath them.

In this article, 'transformation' is understood as the quality of effecting change upon the world. It extends far beyond immediate material engagements, because the world is a social construction comprised not only of the future actions and desires of persons, but equally of imminent substances and objects (cf. Heidegger [1983] 1995). Approached on these terms, the transformation of scrap work may begin with the material re-formation of objects. However, such action makes sense only when it is part of a project of economic value transformation that is both social and imaginative. Transformative work of this type is accurately deemed social, because the products of one's labor acquire different economic values by virtue of being necessarily evaluated by other persons. Transformative work is also imaginative, since the effective commission of that work entails a prior conception of how the products of one's labor will be engaged with by persons other than oneself. This article will explore transformative work through the ethnographic lens of problem solving—by which a person determines how to alter the object of their labor, in a manner that realizes a new value—and concomitant imaginations of how the products of one's labor might be used by people who could be distant and obscure. In this regard, transformation is the indispensable work that underpins the social life of value (cf. Munn 1986; Myers 2001) and enables value to 'bring universes into being' (Graeber 2013).

This article is part of a wider project through which I am attempting to understand 'technologies of transformation'. By this term, I refer to a range of processes and institutions that are valued by people because they can impact the world around them. Many of these technologies are collective and, under the right conditions, can include trade unions and political parties (Kesküla and Sanchez 2019). As broadly feminist research on factory employment has revealed, even in contexts of social marginalization employees may find their labor satisfying when it is regarded as part of a collective project of meaningful transformation (Lynch 2012; Ngai 2005; Plankey-Videla 2012; Wright 2006). However, some technologies are experienced at a micro level that involves finer engagements with work tasks themselves. An effort to understand those engagements should not be mutually exclusive to an interest in broader, collective understandings of political economic life. This article suggests that one might better understand the human experience of labor by training analytic focus upon ongoing processes of transformation. In this regard, the article responds to long-standing feminist critiques of how economy is conceptualized (cf. Bear et al. 2015) by showing how the value and satisfaction of labor are distributed in economic processes that are generally underappreciated.

The article proceeds from an assumption that close attention to transformative processes might productively broaden our understanding of how different forms of work are experienced and evaluated. Exploring an idea that has long been at the core of feminist scholarship on economy, Graeber and Sahlins (2017) note that not all forms of work enjoy the privilege of being recognized as valuable, and those that do are often 'emblematic' of their social context. For this reason, activities such as waste work and care work are often perceived as either peripheral to 'real' economic processes or in some way characterized by a non-transformative maintenance of order. It is conspicuous that this imagined category of non-transformative work encompasses much of the labor that is either accomplished in the domestic setting or is associated with female workers or normative 'feminine' responsibilities, such as care work (cf. Buch 2018; Stevenson 2014). The ability to be recognized as a person who transforms value is therefore an inherently political question—one that reveals the ideologies and inequalities that structure any given social context.

The article will demonstrate that satisfying tasks are rooted in transformative processes. In this instance, the transformation at hand is a transformation of economic value. The structure of the discussion will be to take a series of secondary analytics that are major areas of debate in studies of work and demonstrate how each of them is illuminated by the primary analytic of transformation. First, the article provides further ethnographic context to the fieldwork.

Scrap Work

Founded in 1977 by an uncle and nephew who are today in their mid-sixties, Lohar Enterprises employs 10 people whose work is to collect, weigh, chop, crush, and sort a variety of metal waste using basic hand tools. A significant amount of the yard's raw material is industrial waste, purchased from local factories, metal shops, and building contractors. However, most of the yard's material is purchased from entrepreneurial scrap collectors, who scavenge and buy metal waste from all across the city. Lohar Enterprises processes and sells the bulk of its material to one of several larger local facilities, where it is melted into ingots, bars, and sheets of metal. A small proportion of scrap is reserved for sale at higher prices to walk-in customers. This material mainly comprises items like window grills, tools, and spare parts for automobiles, which retain their original use value and may be sold in their unaltered form. Most of the business of buying, processing, and selling metal takes place outdoors in the yard itself, where customers queue to weigh materials on an enormous set of scales while employees noisily flatten oil cans and disassemble objects around them. The owners of the scrap yard are present every day at the workplace, where they perform the entrepreneurial work of negotiating contracts for waste collection and haulage. However, daily work is subject to little overt instruction on the part of the owners or their elderly foreman, and workers are largely left to complete tasks under their own initiative.

Work processes are enmeshed within social structures of learning and skill acquisition, class, gender, ethnicity, and age. These structures make it more likely that some persons' work will be transformative, or at least will be valued and recognized as such.² In Dipesh's case, it is the latter that eludes him. Dipesh's job is negatively valued within Indian society, where it is subject to the prescriptions of ritual pollution that pertain to working with metal and waste (cf. Fredericks 2012; Gidwani 2013; Hart 1973). Moreover, the yard's workforce is made up of precarious employees who are alienated from traditional sources of social capital. Lohar's labor force is largely comprised of people in their thirties and forties who migrated to Jamshedpur from poor villages in neighboring states. Many did so as young children, in the wake of parental death or family crisis. As such, the employees of the scrap yard generally lack the security of an extended local kin network and are desperately reliant upon their daily wages. The job itself is physically demanding: scrap metal is dirty work that demands a tolerance for being covered in rust and grease and enduring the health risks of inhaling clouds of dust and fine particles of metal. The work also involves a reasonable amount of heavy lifting and is dangerous, since the things that one handles are usually sharp, hard, and awkwardly shaped. To compound these experiences, employees suffer from the certainty that in a small workplace of this type, the form and remuneration of one's employment will almost certainly

never change, and there is no career ladder to speak of (Sanchez 2018). Situated within the wider political economy of Jamshedpur, Lohar employees are also isolated from an urban working-class culture centered around employment in the large factories of the Tata company (Sanchez 2016). This culture conspicuously excludes both the rural poor and recent migrants (Sanchez and Strümpell 2014).

The people who work at Lohar Enterprises do so seven days a week, with two paid days off per year, for a daily wage of Rs 200 (€2.30/US\$2.70). While the labor force enjoys a good degree of informal job security through the patronage of their employer, they nonetheless lack any contractual guarantee that their jobs will be safe next month or next year, and cannot anticipate anything as valuable as the receipt of pensions or sick pay. As is increasingly apparent in the anthropology of work, precarious labor does indeed make for precarious lives (Millar 2014: 35; Muehlebach 2013). However, despite the difficult conditions of the labor and the social stigma attached to it, Lohar employees express satisfaction with the work process itself—a process that, to the untrained eye, seems to consist largely of breaking things whose former use value has expired.

Satisfaction is an ethnographic object that is hard to approach methodologically. As a largely affective state, it must be extrapolated from observations of how people do things and what they say about them. It is difficult to determine a precise moment at which frustration slips definitively into satisfaction: in all likelihood, that neat moment never exists. In this respect, satisfaction, as an ethnographic object, is similar to other ambiguous aspects of the human condition, such as hope, desire, or political consciousness.

Taking inspiration from Karl Groos, Graeber (2018) argues that a lack of job satisfaction in large swaths of the modern labor market is rooted in the inability to see how one's work impacts the world in a manner that is socially meaningful and 'caring'. This observation strikes me as broadly correct. However, the ability for one's work to 'care' for the world might be better conceived as one expression of the ability to transform the world (in a manner more consistent with Groos's formulation). Doing so helps us to account for the satisfaction experienced by persons whose work harms the world but is nonetheless satisfying because it is effective at accomplishing its goals. Here, one might consider Laurie Gunst's (1995) ethnography of enforcers working in Jamaican organized crime. The men whom Gunst works with have committed terrible acts of violence. Nonetheless, it is striking that some of them express satisfaction in their ability to wield the transformative power of turning life into death (ibid.: 203). Commentaries from Gunst's research participants are not accompanied by a lack of insight, empathy, or superficial affect, and it is not helpful to reduce them to pathologies. Satisfaction is based upon an ethic of transformation that encompasses care but is not limited to it.

The claims of satisfaction made in this article are based upon long observations and engagements with the work process at Lohar Enterprises, with sensitivity toward peoples' absorption in their tasks, the expressions and statements of pride and contentment that emerge from these undertakings, and conversations about the purpose and experience of work itself. Such discussions were part of my engagements with a wide variety of working people across the city of Jamshedpur and proved highly illuminating. What they revealed was that the single most important factor in peoples' determination of good work was an engagement with processes that make demands on one's ability to affect change upon the world. Put more simply, people liked work that challenged them to alter something, be it the material form of an object, the value of a commodity, the dispositions of other people, or the skills and capacities of themselves. This observation raises important questions for theories of labor, alienation, and value, which see the type of satisfaction that is experienced at Lohar Enterprises as arising from work that is defined in reference to whether it is task-based, skilled, or creative (Ingold 2013; Sennett 2008).

In the next section of the article, I consider how the secondary analytic of 'creation' relates to transformation.

Creation

A long intellectual ancestry suggests that human beings possess an innate, creative urge to bring things into being through task-based, skilled work. This assumption is currently expressed most clearly in the work of Richard Sennett (2008) and Tim Ingold (2013). Beyond the field of craft studies, the same assumption dominates philosophical understandings of the human experience of work as creative and instrumental 'action' (Arendt [1958] 1998). Although Hannah Arendt proposes a distinction between work and action (the latter describing the transformative capacity to effect change upon the world), her understanding of the human condition is nonetheless rooted in the Roman conceptualization of *Homo faber*, which stresses the significance of acts of building and creation to this process (ibid.).

Many tasks are satisfying to the extent that they provide their participants with feelings of contentment, identification, and the expression of agency. Artistic and artisanal work often falls within this remit. However, our understanding of such tasks is limited by the assumption that they are satisfying primarily because they bring a creation into being.³ This article does not claim that creative processes are *not* satisfying. Rather, I argue that creativity is one expression of a broader family of transformative processes, some of which may not be creative at all. It is the transformative dimension of a task that endows its participant with satisfaction, as opposed to its creative aspects

(which I argue are epiphenomenal to satisfaction). Understanding this distinction provides the conceptual wherewithal to appreciate why the types of engagement that one traditionally associates with creative artisanship can also be experienced by persons whose labor disassembles rather than makes, and by persons who have widely variable relationships to skill, time discipline, and the distinction between manual and non-manual labor. The value of focusing on 'transformation' here lies in its capacity to capture all possibilities and directions of material change while also leaving behind some of the cultural and ethical baggage inherent in terms like 'creativity.'

The conceptual slippage that I highlight stems from a fetish for creativity in the social sciences, which regards artistic process as the purest expression of human identities (Ingold 2013: 19), and sees the act of design and building as the fulfillment of fundamental human urges (ibid.: 39). In Hallam and Ingold's (2007) ambitious appraisal of anthropology's engagement with the human condition, transformation is an important aspect of cultural improvisation. However, it is the spirit of creativity that is integral to the process of a fulfilling social life. Further afield, in the sociology of art Howard Becker (2006: 23) has understood improvisation itself to be a succession of moments of completion and creation. Yet it is only the rites and social structures that adhere to processes of artistry which give an impression that they are a series of definite moments of creative completion and mastery. The actual process itself is open-ended.

Following Strathern's (1999: 161–203) insights on divergent conceptualizations of substance, I suggest that this analytic emphasis on creativity is itself the product of a Western intellectual and cultural history that privileges discrete processes of becoming, which result in something being definitively made in a complete form. This cultural emphasis on creation can be connected to the cosmologies of the Abrahamic religions, whose notions of ontogeny are themselves rooted in God's initial act of Creation. As many scholars have observed, this emphasis on creation conflicts with understandings of personhood in many other cultural systems (Descola 2012; E. Leach 1966; Rival 1998; Riviere 1974).

The assumption that creation is integral to a subjective identification with one's labor rests upon a selective reading of Marx's writings on alienation that confuses the principles of skilled creation with those of transformation, and accordingly places a great deal of emphasis on the creative dimensions of artisanship. Comparative ethnography would suggest that those who perform creative artisanship do not in fact idealize it (Cant 2016: 21; Coombe 1998; Marchand 2010; Venkatesan 2010; Wood 2008). However, a more prevalent strand of thought posits that craft and industrial labor belong at opposite ends of a continuum of alienation (Sennett 2008). This model assumes that creative dimensions in the work process constitute the grounds for satisfaction, since it is these qualities that imbue the product of labor with the identity of

its maker (Errington 1998: 140–141). As such, the products of creative artisanal work process are deemed to be inalienable (J. Leach 2003; Myers 2001; Weiner 1992).

The enduring presence of alienation in debates on artisanship stems from early references to Marxist principles in the Arts and Craft movement of the late nineteenth and early twentieth centuries (cf. Cant 2016: 24, Greenhalgh 1997: 32–36). William Morris drew heavily on Marx's writings on the form of alienation termed 'self estrangement' from the act of production (Marx [1844] 1970: 111). Deviations from the human urge to engage in creative, productive work, which Marx discussed using the concept of 'species-being' (see Marx [1844] 1970; Marx and Engels [1846] 1970), are assumed to be artifices of coercive political-economic forces, which engender lives of hegemony and ennui for their subjects: work that does not create is unnatural and therefore unsatisfying in a way that is hard to quantify. Morris ([1888] 1896: 117) regarded industrial wage labor as an imposition upon human will, distinct from the urge to create, which is central to the human condition.

To avoid an overestimation of creativity, I suggest that satisfying work is better conceived as an ongoing process of transformation, with creation being one possible moment of completion that is not present in all such practices. The distinction between creation and transformation here is subtle but important. Creation implies a moment of completion and closure, in which something new has been definitively brought into being through action. Such objects may be revisited in the future, and new actions may be made upon them. However, the initial act of creation itself is complete, and always will be.

In the anthropology of work, the emphasis on the value of creation still persists, partly because large portions of the field are conceptually informed by analyses of art and craft work, which tend to posit that such work is desirable precisely because it is premised on principles of authorship or inalienability (cf. Cant 2016). This approach constructs a dichotomy between different types of tasks and has the further effect of implying that the act of disassembling things under economically alienating conditions should not be satisfying.

Judged in terms of conventional thinking on the nature of work, scrap yard employees are problematic in their ability to derive artisanal satisfaction from what looks to be a process of breaking things. If Sennett's craftsman is a skilled person who makes objects out of materials, then scrap workers make materials out of objects, and the process of disassemblage seems to be craft working backwards. In figure 1, a scrap metal worker named Artul demonstrates this process as one aspect of his daily work. Artul is engaged in the act of crushing dozens of metal oil cans, which he packs into the square metal frame at his feet before compacting them with the metal cudgel in the foreground. In this image, Artul is binding compacted cans into bales with lengths of wire so that they can be more easily loaded onto a truck, taken away, and melted. One could



FIGURE 1: Binding bales of oil cans. Photograph © Andrew Sanchez

claim that he enjoys his work because he is 'making' bales of metal, but at the same time he is also 'breaking' cans to do so.

Likewise, the Lohar workers who render unruly heaps of materials into orderly piles of aluminum and steel may be regarded as 'making' those piles. However, it is limiting to regard the final, discrete moment of completion in this process as the locus of satisfaction. Rather, the work is an ongoing process of transformation, in which satisfaction is distributed throughout that process. Tellingly, it is when the transformative process stalls that expressions

of frustration become most apparent, for example, when a stubborn metal object resists Dipesh's attempts to disassemble it. Such transformative frustration may also be experienced in non-artisanal work that is directed at more long-term ends.

The analytic value of conceiving of satisfying work as transformative, rather than primarily creative, is to encompass the fact that 'making' is an ongoing process that extends beyond the creative instant. The very idea that transformative work would be meaningfully defined by such an instant is itself a culturally bound interpretation, associated more strongly with some ontogenies than others. A reconceptualization of creation as a form of transformation provides an analytic perspective that is less prescriptive and better suited to the ethnographic imperative.

In the section of the article that follows, I consider how the secondary analytic of skill in the work process may be understood in terms of transformative action.

Skill

In figure 2, Arun uses a hammer and a screwdriver to disassemble part of an electrical motor. In this image, Arun is attempting to extract the coiled copper wire at the core of the motor, which is more valuable than the rest of the object, made of aluminum, steel, and brass. To accomplish this task, Arun uses his hand tools in a reflexive way; this is to say that the effective use of such simple tools demands a greater degree of inventive skill than is ordinarily demanded by more complex, mechanized technology. For example, in Jamshedpur's large automobile factories, which were the subject of my earlier research, an overhead hydraulic crane on an assembly line is operated via a joystick, which enables the crane's arm to move up and down, or left and right, and its claw to close and open. It is certainly possible to operate such machinery incorrectly or unproductively, or to apply it to tasks for which it is not intended. However, as one would expect in a Fordist production regime where efficiency is premised on standardization and deskilling, the range of ways in which the technology may be used is limited, and not subject to considerable ad hoc improvisation on the part of those who do so.

By contrast, the scrap workers at Lohar Enterprises frequently apply hand tools to a range of actions that they were not necessarily designed for. At several points during the disassemblage of the motor, for example, Arun chooses to use his screwdriver as a chisel, and makes creative technical choices of this type as and when the work process demands it. Furthermore, the tools that he uses are frequently made from the discarded parts of other objects, and colleagues will repair and improve upon them as their strengths and weaknesses become apparent. It takes a long time to learn how to use these tools effectively



FIGURE 2: Disassembling an electrical motor. Photograph © Andrew Sanchez

for such a wide range of tasks, and how they are used is not the same from one person to the next. To this extent, Arun's experiences are consistent with Ingold's (2013) assumption that the fashioning and use of hand tools is an intrinsically human area of satisfaction and Mol et al.'s (2010) observation that technology usually demands 'tinkering' and improvisation.

Beyond an engagement with his tools, Arun also needs technical understanding about how things are made in order to know how to take them apart using non-specialist equipment. When Arun is asked to strip a motorcycle using only

a hammer and an axe, he must understand what types of welding and bolts hold the machine together and what their weaknesses are vis-à-vis the tools at his disposal. It is through this type of skill that he is able to transform derelict objects into valuable piles of well-ordered metal and rubber.

Arun's work also requires a grasp of the business itself, which involves the social acumen of haggling with buyers and sellers and the expertise of knowing the material one is bargaining over. In a business where customers will attempt to convince scrap yard employees that an item is made of a material that is either more or less valuable than it truly is, Arun and his colleagues can distinguish between aluminum, steel, copper, bronze, and tungsten. Just as importantly, they can accurately say what these materials are worth at any given moment in the dynamic metal market. Scrap work, then, demands a reflexive engagement with a variety of technical and social skills. The unique coincidence of these skills is rooted in an industrial environment with low levels of technological sophistication that also relies on mercantile negotiations for heterogeneous commodities that shift between regimes of value in the workplace itself.

On the basis of this ethnography, there is potentially an easy answer to one of the questions posed by this article: people are more satisfied in the scrap yard than on some Fordist shop floors because they do a wider variety of things that require a greater level of skill. Certainly, Dipesh's own discourses on his work would support this reading. However, while taking these emic interpretations seriously, I argue that skill does not explain why assembly line and scrap work are often experienced differently by the people who do them. The degree to which one is able to do things that others cannot has a strong impact upon the security and compensation of one's employment. It is also a reliable index of the alienation by which one's labor power is readily substitutable for another's. As such, questions of skill are often integral to the political and economic life of jobs (Thompson [1963] 1991). In the Lohar scrap yard, it is notable that although Arun does not earn much, he is still paid more for his labor power than unskilled manual workers in the same city and has managed to retain his job for many years. This is largely due to his possession of a combination of skills that are hard to acquire and use effectively. However, this does not address the broader analytic problem that people who perform certain types of skilled work routinely find their tasks unengaging, while low-skilled activities may be conversely satisfying if directed toward particular types of action. Furthermore, as feminist critiques have long shown, the very category of 'skill' is a gendered cultural construction that obscures the capacity and value of tasks undertaken in domestic contexts, as well as those that are non-marketized (Acker 1990; Armstrong 2013; Phillips and Taylor 1980). On these bases, it is unwise to read satisfaction primarily in reference to skilled artisanship.

Nonetheless, assumptions about the centrality of skill persist in major areas of anthropological thought about the historical emergence of alienation in production (Carrier 1992), and in discussions of popular engagements with learning in the workplace (Dudley 2014; Grasseni 2007; Prentice 2012). Core elements of popular Marxist interpretation are correct, insofar as a lack of skill usually correlates with a higher degree of economic alienation, and the degradation of skilled work is a key technology of disembedded market capitalism (Braverman 1974; Polanyi [1957] 2001). However, the assertion that there is a necessary correlation between skill and the subjective experience of work satisfaction is more tenuous. Understanding why some types of work are more satisfying than others requires a fuller appreciation of the nature of the task at hand and how skills facilitate that task. In respect to questions of satisfaction, skill should be conceptualized as a technology of transformation, as opposed to an end in itself.⁴

Returning to Arun, a satisfying task is one that is characterized by its transformative dimensions—in this instance, the problem-solving work of value transformation. Skill is what enables Arun to do this effectively. In a revealing commentary on the work process, Arun asserts that the disassemblage of an electrical motor is satisfying (Hindi: santoshjanak) because it is interesting (Hindi: dilcasp). Elaborating further, he explains: "These things look like waste. But there is money here. All day I am looking for the money. This used to be rubbish, but now it is valuable. I am making that happen." The importance of Arun's comment is not that it draws attention to the value chains of the waste industry. Such processes are not obscure and have been interrogated in a large literature which demonstrates that waste is not the antithesis of value (Alexander and Reno 2012; Alexander and Sanchez 2019; Lepawsky and Billah 2011; Reno 2016). Rather, the significance of Arun's experiences is that they point to the satisfaction to be had by effecting the transition of objects between different regimes of value. In a space like a scrap yard, cycles of commodification make value a necessary focus of the work process and an important object to which skill may be applied with transformative intent.

Graeber's (2001) theory of value has helpfully deconstructed the notion that value creation is limited to processes of production and consumption. He notes the wide range of human activities that are generative of value and entail neither making nor consuming: his examples include the donning of dress and participation in rites of passage. Graeber's critique of the production-consumption complex in value theory might be read as suggesting that scrap yard employees misconceive the value of their work by attending to the economic relations of the waste industry. However, I think that this interpretation would be an oversimplification of Graeber's ideas. By training the analytic lens at a more fundamental level of action, I suggest that acts of meaning-making (such as Graeber's rites of passage) share something with the commodity-focused acts of buying, disassemblage, and selling, insomuch as they each have the capacity to be transformative. This is why, under the right circumstances, one

might derive satisfaction from trading, just as one might do from artisanship. Indeed, following Nancy Munn (1986), value transformation is at the heart of even rigidly economic processes of wealth consolidation, since value of most types is subject to entropy and must be converted to more stable forms in order to be durable over time.⁵

By viewing skill in the work process through the lens of transformation, one is better able to grasp the fact that work-based skills that inspire feelings of satisfaction are those whose practice is impactful within a given context (in this instance, an economic one). There is an objective condition by which a person may be said to possess a given skill. However, for the purposes of an analysis of work and political economy, the germane considerations are how those skills are being used, what the social context is that enables their effective application, and how they are valued. A work skill that is not practiced within a context that enables it to be impactful is one that would ordinarily not inspire feelings of satisfaction. The reading of work skills as technologies of transformation provides a more sensitive model that captures the inherently social life of labor, through a finer understanding of how capacities are used.

In the section that follows, I explore how the secondary analytic of task may also be reconceptualized through transformation.

Task

For a Lohar Enterprises employee, work is structured around a series of discrete and variable tasks that are governed by the uncertain material loads traded by the scrap yard throughout the course of a day. For example, in the course of an afternoon Dipesh may use a hammer and chisel to disassemble a bicycle before being asked to collect waste from a local factory using a rickshaw, after which he may return to the yard to argue about the price of aluminum with a customer. Lohar employees would seem, then, to have a good deal of flexibility in the rhythms of their working day and some level of control over the things that they do at work.

While Lohar labor is paid on the basis of daily wages, the work itself is effectively task-based. Although one might assume that frameworks such as E. P. Thompson's (1967) distinction between task and time-based labor, and its helpful revisiting in the recent work of Kathleen Millar (2015), could speak to this material, the model is less appropriate than it initially appears. Principally, it is not power over the rhythms of the work process that informs satisfaction in this context; rather, it is the power to transform value. For the purposes of this analysis, the time discipline model does not engage closely enough with the content of a given work process itself; it operates on a somewhat uncomplicated assumption that the term 'task' represents a homogeneous family of

activities, all of which would necessarily be more engaging than time-based labor (Thompson 1967). Such assumptions have been widely reproduced in industrial sociology through a close attention to the satisfaction derived from engaging in piecework (Burawoy 1979: 77–95; Parry 1999). However, what remains to be more fully interrogated is the fundamental question of why one type of task should be more fulfilling to undertake than another. The assumption about the nature of a meaningful and enjoyable task is challenged by the sense of satisfaction that workers get from disassembling things in the Lohar scrap yard. I argue that these tasks are satisfying to the people who do them, not because they have control over the discrete task at hand, but rather because the work is transformative. In this instance, transformation entails the problem-solving work of figuring out how to make something valuable. Doing so requires that one must accurately anticipate the agency of the people who may desire the product of one's labor.

The work of the Lohar Enterprises scrap yard involves taking an object that formerly had a specific use and purpose (which subsequently expired at the moment when the item became defective or unwanted) and dissassembling it in a way that realizes a new value. As Bataille ([1967] 1988) observes, the release of value through the apparent destruction of waste is integral to the accelerated consumption cycles of late capitalism. For scrap workers themselves, this process begins with the salvaging of an article's useful parts, whose purpose is still clear, whose original use value is reasonably intact, and which can be purchased in their current form by a customer who intends to reuse them as the objects they are, rather than as raw materials. In figure 3, a Lohar employee named Dev is applying this process to a pile of broken bicycles that are no longer useful to their former owners as a means of transportation.

Dev is 35 years old, one of seven children born into a lower-caste Yadav family in a village in the neighboring state of Odisha. His father is a worker on the Indian railways, while his mother sews women's clothing for sale in local markets. Dev's parents remain happily married back home in their native village and maintain regular contact with all of their children. However, like many of his colleagues, as a child Dev was forced to travel to Jamshedpur in order to look for work. Today, he and his wife have three young daughters and live in the same slum as Arun. While Dev sits disassembling bicycles, his wife runs a tea stall on the street outside the yard. They would both prefer to have shorter working hours and higher wages. Nonetheless, Dev still enjoys his work. He particularly likes to imagine how the material he is working on will be used by other people, even when the task itself seems rather routine. Dev's engagement with his work echoes Munn's (1986) description of how value transformation in Papua New Guinea functions through the imagination of future social relations.

On this day, Dev has spent the morning separating defective bicycles from their intact handlebars and saddles, which maintain their use value by virtue

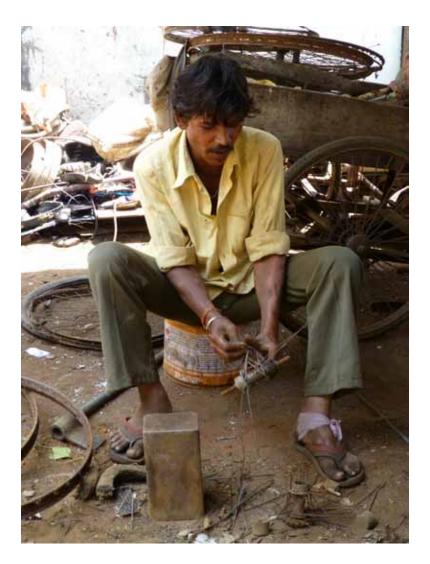


FIGURE 3: Disassembling bicycle wheels. Photograph © Andrew Sanchez

of still being able to fulfill their original function. These parts of the bicycles have been set to one side to be sold for spares. Dev is processing some of the remaining parts of the vehicles that he will transform into piles of aluminum and steel, which have the potential to become useful in new ways once processed into ingots, pipes and sheets of metal. In figure 3, Dev is working with an axe to cut the steel rims of bicycle wheels into short pieces of curved metal and is separating spokes from their hubs. At the core of his task is an engagement with the question of what something is worth to different persons at different

times and places, and in what form it needs to be presented in order for that value to be realized. By disassembling things in this way, scrap workers are facilitating objects' movement between the social contexts that Arjun Appadurai (1986) and later Fred Myers (2001) call 'regimes of value'. The utility of Myers's particular use of this term is that he speaks of value outside of the directionality inherent in Appadurai's 'biography of things' approach. At Lohar Enterprises, this process of value realization entails indirect social relationships with the other actors in the industrial chain, which takes place via a transformative engagement with the object of disassemblage itself.

As an example from fieldwork, if one day Dev unearths a chipped microscope in a pile of scrap metal, he must consider why a person has discarded it, what might be wrong with it that cannot yet be seen, and what is the likelihood that another person will buy the intact object (with the intention to look at things through its lens) for a cash price greater than its scrap value. These are questions that Dev must ask himself before he begins chopping with his axe. Such considerations of value anticipate the demands of other persons, yet function primarily through an engagement with an object of transformation. Dev's microscope is a particularly clear illustration of this process, since the object is strange within that context and has such a highly specialized use. However, the same process of valuation pertains to scrap workers' engagements with the discarded cooking pots, tin cans, lathe turnings, and twisted lengths of steel that comprise the larger part of their work. All such objects begin their lives as items with a particular use value (as things that can hold liquid or are appropriately hard or pliable) before being reduced back down to their sheer materiality through the action of hammers, chisels, and furnaces. This process entails anticipating another person's willingness to cook with a discarded pot, or to invest the necessary effort to straighten a steel rod. It is when this prior use value is perceived to be irreclaimable or is superseded by the exchange value of the metal itself that the work of disassemblage takes place. For people like Dev, to undertake this work is to engage with a satisfying puzzle that challenges them to imagine the best means to effect transformations of value.

In reference to his ethnography of British carpenters, Trevor Marchand (2010, 2016) draws attention to a human cognitive tendency to derive satisfaction from problem solving. At Lohar Enterprises, the yard's elderly foreman spends large amounts of the day completing Sudoku puzzles, while his subordinates are engaged in problem-solving work of their own. Dev's routine acts of disassemblage may well be like a Sudoku grid, which is satisfying to engage with, even for a master player for whom the puzzle poses no real challenge. Like Dev's work, the Sudoku grid requires one to imagine the steps that will be necessary to transform it from something that is partial and chaotic into something that is orderly. However, if the satisfaction of such tasks lies in their transformative dimensions, as I claim, then it should be revealed by the

ways that the completion of the task is experienced. Tellingly, on completion, the Sudoku enthusiast will start a new puzzle all over again. The point of the puzzle is that it is satisfying when it is literally *in play*. While a finished puzzle may inspire a fleeting feeling of completion, it is not an enduring source of satisfaction for any length of time, nor is the completed puzzle an artifact to be preserved. It is the process—not the end—that matters. This is why positive engagements with the task-based work of problem solving are based on an ethic of transformation rather than one of completion. My interpretation of this data is that problem solving at Lohar Enterprises is an inherently social project, through which Dev understands the value chains of his work.

To understand the social nature of Dev's material engagement with value, Alfred Gell's (1998) work provides a helpful conceptualization not only of how objects speak to us, but also of how we speak to one another through objects. Based on his analysis of art objects, Gell's theory of agency suggests the concept of abduction to describe how persons consider the values and capacities of one another to be mediated by the objects that stand between them. At Lohar Enterprises, a similar process is apparent in the daily considerations of what value an object has held for different persons or could hold in the future, and the work that would be necessary to facilitate such a change. In this regard, the work of disassemblage demands that those who perform it negotiate different use and exchange values through a tactile engagement with objects. These work processes therefore entail an engagement with the materiality of things but are ultimately focused upon the imagined human uses of that object. For that reason, Dev's work is not helpfully captured by Latour's theorization of 'object agency' (see Johnson 1988).

In comparison to the assembly line workers whom I have previously conducted research with, Dev has a degree of freedom in the micro aspects of his work process. Nonetheless, it is not necessarily productive to read work satisfaction through the lens of time control and work discipline, since doing so may divorce work processes from the broader social conditions of contemporary employment and the wider forms of disciplining that accompany the career trajectory of precarious persons. Dev may be able to choose how he uses his time when he is at work, and he does not labor under the overt work discipline that afflicts the lives of assembly line workers. Nevertheless, his life is disciplined by the fact that his working hours are so long, his holidays so few, and his wages so low that he is compelled to remain in whatever employment is offered him, until such a time as his employer decides otherwise. For precarious persons everywhere, the uncertainty of being poor and unprotected is itself a form of discipline and control (Lazar and Sanchez 2019).

What enables Dev to feel satisfied in his work is not the fact that his work processes are directed to discrete tasks that he controls; rather, it is because those tasks have a notably transformative dimension. The usefulness of understanding

work tasks in relationship to transformation is that such an approach uncouples alienation from typologies of labor whose objects of analysis have undergone extensive change in recent decades. In a global context characterized by more widely distributed employment precarity, economic alienation does not correlate in any definite way with alienation from work satisfaction. Were this otherwise, many workers in the affective industries would have higher wages. Likewise, a lack of time discipline does not necessarily imply an identification with that work or meaningful power in the labor market. This assertion is supported by the experiences of many persons working on zero-hours contracts in the so-called gig economy of self-employed labor: although their work is flexible, it is by no means either free or empowering. A focus on the transformative dimensions of a given work task provides the analytic tools to understand how persons engage with their work in a way that is less bound by earlier typologies and is therefore better able to capture the fractured nature of contemporary labor.

Conclusion

What is satisfying to Arun, Dipesh, and Dev is the transformative movement of an object from one type of value to another by disassembling and sorting it according to different regimes of value. This process entails an applied imagination of how the objects of one's labor will be used differently by different persons as a direct consequence of the work process. Like the rusting bicycles that are taken apart with axes, melted into strips of steel, made into new bicycles, used, and then sold again to the scrap yard, transformations of value have no definitive beginning or end. This would necessarily be the case since, in the sense that concerns this article, value exists only in the uses and desires of human beings. Something that appears at one moment to be inherently worthless and thus no longer part of the transformative cycle is simply not yet located in the right context for its value to be realized. This is why Myers's (2001) reformulation of regimes of value is helpful to this debate, since it shows that worth is imagined and constituted socially and is therefore not bound by any natural barriers to how often it may change.

The ethnographic context that I focus on here lends itself to an economic analysis, since the scrap yard acts as a facilitating node within cycles of use and recommodification. For this reason, the transformations that I describe are those that relate to economic value. But what argument am I making about the relationship between that value and satisfaction more generally? My assumption is that transformations of economic value are integral to the satisfaction that I describe in this case. However, I believe that the motor of satisfaction is the *transformative action itself*, which is related to economic value in some instances but not all.

Conceptualized as the capacity to effect material or social change upon the world, the primary analytic of transformation explains negotiations of economic value but is not confined to an understanding of those phenomena alone. That is to say, the analytic of transformation might be productively applied to broader processes of problem solving, learning, and artistry, in addition to questions of work and economy. The primary contribution of the analytic is to capture the social relations and impacts of these processes, while also capturing the subjective ways in which individuals experience and value doing them. The model therefore enables one to approach apparently diverse questions of satisfaction, alienation, and value through one discrete ethnographic lens—that of transformative human action. In this way, the analytic I propose reconciles several major debates in theories about economy, agency, and the human condition. For this reason, the model is distinct from Munn's (1986) theory of the social processes that enable the reconfiguration of value. The model also expands upon existing theories of work that would struggle to explain why socially undervalued tasks can nonetheless be experienced as satisfying (see Graeber 2018; Graeber and Sahlins 2017).

I suggest transformation as an analytic lens through which to read a wide range of human actions, their impacts, and the engagements that they inspire. Using this model, one might consider Caitlin Zaloom's (2006) research participants, who work at the sharp end of financial capitalism. Such persons live lives of stress and self-doubt, but nonetheless find satisfaction in their ability to shift commodities between markets and thereby transform their value. Stepping away from such clearly economic contexts, one might look to Loïc Wacquant's (2004) apprentice boxers: training in a Chicago gym, they are tormented by the knowledge that most fighters never make it big, but enthralled by the processual transformation of turning their body into a boxer's body. In this example, the transformation at hand is one of self-mastery and self-change, as one learns how to become a different type of person (ibid.).

Considering the wider applicability of the model that I propose, one might counter that some forms of care work entail the maintenance of well-being and are therefore characterized by an ethos of stasis. If such a proposition is correct, the point of care would be to arrest negative transformation in the service of a preferable status quo. However, I think that such an understanding is incorrect. All acts of care are intrinsic declarations of transformative power, since they imply that one's work has demonstrable effects upon the world. Care work has the capacity to keep the forces of entropy or suffering at bay in a manner that is itself transformative. It is for this reason that such work might be a source of satisfaction. This observation is well supported by Russ's (2005) ethnographic research among hospice workers, for whom labor is a balancing act that walks the line between maintaining one's distance while still making a difference.

The satisfaction of transformation is based upon the ability to see one's work and actions effecting change. Crucially, I suggest that it is the *extent* of such a transformation that governs levels of satisfaction, as opposed to any simple binary logic by which something either is or is not transformed. A transformative process of this kind *may* be creative, just as it *may* be skilled. But it is not necessary for it to be either. The core of satisfaction is the imagination and observation of change, which are present in abstract problem solving (Marchand 2016) just as they are in the tactile engagement with materials. I would suggest that this insight pertains to technical labor, care work, gardening, medicine, artistic production, and certainly to teaching (which is satisfying when a change is observable in the perception and abilities of one's students). As I encountered during earlier ethnographic research on factory shop floors, it is the absence of this quality that informs peoples' complaints that their work is dull, oppressive, and without purpose.

I propose transformation as a productive analytic through which one might reread a wide range of processes as a means of grappling with the perennial question of why people do or do not like the things that they do. It is the process of transformation that determines the satisfaction that some of us find in our actions. This includes people who chop and crush waste for a living.

Acknowledgments

The author wishes to thank the people who generously participated in the field research. Various drafts of this article were presented at Goldsmiths College, LSE, University of Cambridge, University of Edinburgh, University of Kent, University of Oslo, University of Pilsen, and University of Sussex. Comments from participants at these events, anonymous reviewers, and the *Social Analysis* editorial team are appreciated. The fieldwork was funded by the Max Planck Society as part of the "Industry and Inequality" project group based at the Max Planck Institute for Social Anthropology.

Andrew Sanchez is a specialist on the anthropology of class, labor, and corruption, and has conducted ethnographic fieldwork in urban India among industrial workers, trade unionists, and entrepreneurs. His first book *Criminal Capital: Violence, Corruption and Class in Industrial India* was published by Routledge in 2016. E-mail: as2672@cam.ac.uk

Notes

- 1. Names of research participants and the workplace have been changed. Translations are my own, unless otherwise indicated.
- 2. Cf. Pfaffenberger (1992: 497) on socio-technical systems.
- 3. I use the term 'creativity' to describe a process that effects creation, but does not necessarily imply a newness of design and execution.
- 4. Marx's ([1867] 1976) later work suggests that what defines human nature is the urge to enact a previously envisaged change upon the world. Here, Marx distinguishes humans from other animals that build things (such as spiders and bees), which are not assumed to imagine and plan their efforts.
- 5. For a discussion of entropy and conversion in Melanesian societies and scholarship, see Foster (2018).

References

- Acker, Joan. 1990. "Hierarchies, Jobs, Bodies: A Theory of Gendered Organizations." Gender & Society 4 (2): 139-158.
- Alexander, Catherine, and Joshua Reno, eds. 2012. Economies of Recycling: The Global Transformation of Materials, Values and Social Relations. London: Zed Books.
- Alexander, Catherine, and Andrew Sanchez, eds. 2019. Indeterminacy: Waste, Value, and the Imagination. New York: Berghahn Books.
- Appadurai, Arjun. 1986. "Introduction: Commodities and the Politics of Value." In The Social Life of Things, ed. Arjun Appadurai, 3-63. Cambridge: Cambridge University Press.
- Arendt, Hannah. (1958) 1998. The Human Condition. 2nd ed. Chicago: University of Chicago Press.
- Armstrong, Pat. 2013. "Puzzling Skills: Feminist Political Economy Approaches." Canadian Review of Sociology 50 (3): 256-283.
- Bataille, Georges. (1967) 1988. The Accursed Share. Vol. 1: Consumption. New York: Zone Books.
- Bear, Laura, Karen Ho, Anna Lowenhaupt Tsing, and Sylvia Yanagisako. 2015. "Gens: A Feminist Manifesto for the Study of Capitalism." Society for Cultural Anthropology, 30 March. https://culanth.org/fieldsights/ gens-a-feminist-manifesto-for-the-study-of-capitalism.
- Becker, Howard S. 2006. "The Work Itself." In Art from Start to Finish: Jazz, Painting, Writing, and Other Improvisations, ed. Howard S. Becker, Robert R. Faulkner, and Barbara Kirshenblatt-Gimblett, 21–30. Chicago: University of Chicago Press.
- Braverman, Harry. 1974. Labor and Monopoly Capitalism: The Degradation of Work in the Twentieth Century. New York: Monthly Review Press.
- Buch, Elana D. 2018. Inequalities of Aging: Paradoxes of Independence in American Home Care. New York: New York University Press.

- Burawoy, Michael. 1979. *Manufacturing Consent: Changes in the Labor Process under Monopoly Capitalism.* Chicago: University of Chicago Press.
- Cant, Alanna. 2016. "Who Authors Crafts? Producing Woodcarvings and Authorship in Oaxaca, Mexico." In *Critical Craft: Technology, Globalization and Capitalism*, ed. Clare M. Wilkinson-Weber and Alicia Ory DeNicola, 19–34. London: Bloomsbury.
- Carrier, James G. 1992. "Emerging Alienation in Production: A Maussian History." *Man* (n.s.) 27 (3): 539–558.
- Coombe, Rosemary J. 1998. *The Cultural Life of Intellectual Properties: Authorship, Appropriation, and the Law.* Durham, NC: Duke University Press.
- Descola, Philippe. 2012. "Beyond Nature and Culture: The Traffic of Souls." *HAU: Journal of Ethnographic Theory* 2 (1): 473–500.
- Dudley, Kathryn Marie. 2014. *Guitar Makers: The Endurance of Artisanal Values in North America*. Chicago: University of Chicago Press.
- Errington, Shelly. 1998. *The Death of Authentic Primitive Art and Other Tales of Progress*. Berkeley: University of California Press.
- Foster, Robert. J. 2018. "Entropy, Alchemy and Negative Pigs: Obviating the Matter of Wealth." *History and Anthropology* 29 (3): 292–306.
- Fredericks, Rosalind. 2012. "Devaluing the Dirty Work: Gendered Trash Work in Participatory Dakar." In Alexander and Reno 2012, 119–142.
- Gell, Alfred. 1998. Art and Agency: An Anthropological Theory. Oxford: Clarendon Press.
- Gidwani, Vinay. 2013. "Six Theses on Waste, Value, and Commons." *Social & Cultural Geography* 14 (7): 773–783.
- Graeber, David. 2001. Toward an Anthropological Theory of Value: The False Coin of Our Own Dreams. New York: Palgrave.
- Graeber, David. 2013. "It Is Value That Brings Universes into Being." *HAU: Journal of Ethnographic Theory* 3 (2): 219–243.
- Graeber, David. 2018. Bullshit Jobs: A Theory. New York: Simon & Schuster.
- Graeber, David, and Marshall Sahlins. 2017. On Kings. Chicago: HAU Books.
- Grasseni, Cristina, ed. 2007. *Skilled Visions: Between Apprenticeship and Standards*. New York: Berghahn Books.
- Greenhalgh, Paul. 1997. "The History of Craft." In *The Culture of Craft*, ed. Peter Dormer, 20–52. Manchester: Manchester University Press.
- Gunst, Laurie. 1995. Born Fi' Dead: A Journey through the Jamaican Posse Underworld. New York: Henry Holt.
- Hallam, Elizabeth, and Tim Ingold, eds. 2007. *Creativity and Cultural Improvisation*. Oxford: Berg Publishers.
- Hart, Keith. 1973. "Informal Income Opportunities and Urban Employment in Ghana." *Journal of Modern African Studies* 11 (1): 61–89.
- Heidegger, Martin. (1983) 1995. *The Fundamental Concepts of Metaphysics: World, Finitude, Solitude*. Trans. by William McNeill and Nicholas Walker. Bloomington: Indiana University Press.
- Ingold, Tim. 2013. *Making: Anthropology, Archaeology, Art and Architecture*. Abingdon: Routledge.

- Johnson, Jim. 1988. "Mixing Humans and Nonhumans Together: The Sociology of a Door-Closer." Social Problems 35 (3): 298–310.
- Kesküla, Eeva, and Andrew Sanchez. 2019. "Everyday Barricades: Bureaucracy and the Affect of Struggle in Trade Unions." Dialectical Anthropology 43 (1): 109-125.
- Lazar, Sian, and Andrew Sanchez. 2019. "Understanding Labour Politics in an Age of Precarity." Dialectical Anthropology 43 (1): 3-14.
- Leach, Edmund. 1966. "Virgin Birth." Proceedings of the Royal Anthropological Institute of Great Britain and Ireland, no. 1966: 39–49.
- Leach, James. 2003. "Owning Creativity: Cultural Property and the Efficacy of Custom on the Rai Coast of Papua New Guinea." Journal of Material Culture 8 (2):
- Lepawsky, Josh, and Mostaem Billah. 2011. "Making Chains That (Un)make Things: Waste-Value Relations and the Bangladeshi Rubbish Electronics Industry." Geografiska Annaler: Series B, Human Geography 93 (2): 121-139.
- Lynch, Caitrin. 2012. Retirement on the Line: Age, Work, and Value in an American Factory. Ithaca, NY: Cornell University Press.
- Marchand, Trevor H. J. 2010. "Embodied Cognition and Communication: Studies with British Fine Woodworkers." Journal of the Royal Anthropological Institute 16 (S1): S100-S120.
- Marchand, Trevor H. J., ed. 2016. Craftwork as Problem Solving: Ethnographic Studies of Design and Making. London: Routledge.
- Marx, Karl. (1844) 1970. Economic and Philosophic Manuscripts of 1844. London: Lawrence & Wishart.
- Marx, Karl. (1867) 1976. Capital: A Critique of Political Economy. New York: Vintage Books.
- Marx, Karl, and Friedrich Engels. (1846) 1970. The German Ideology. London: Electric Book.
- Millar, Kathleen M. 2014. "The Precarious Present: Wageless Labor and Disrupted Life in Rio de Janeiro, Brazil." Cultural Anthropology 29 (1): 32-53.
- Millar, Kathleen M. 2015. "The Tempo of Wageless Work: E. P. Thompson's Time-Sense at the Edges of Rio de Janeiro." Focaal 73: 28–40.
- Mol, Annemarie, Ingunn Moser, and Jeannette Pols, eds. 2010. Care in Practice: On Tinkering in Clinics, Homes and Farms. New York: Columbia University Press.
- Morris, William. (1888) 1896. Signs of Change: Seven Lectures. London: Longmans, Green.
- Muehlebach, Andrea. 2013. "On Precariousness and the Ethical Imagination: The Year 2012 in Sociocultural Anthropology." American Anthropologist 115 (2): 297-311.
- Munn, Nancy D. 1986. The Fame of Gawa: A Symbolic Study of Value Transformation in a Massim (Papua New Guinea) Society. Cambridge: Cambridge University Press.
- Myers, Fred R. 2001. "Introduction: The Empire of Things." In *The Empire of* Things: Regimes of Value and Material Culture, ed. Fred R. Myers, 3–61. Santa Fe, NM: School of American Research Press.

- Ngai, Pun. 2005. *Made in China: Women Factory Workers in a Global Workplace.* Durham, NC: Duke University Press.
- Parry, Jonathan P. 1999. "Lords of Labour: Working and Shirking in Bhilai." *Contributions to Indian Sociology* 33 (1–2): 107–140.
- Pfaffenberger, Bryan. 1992. "Social Anthropology of Technology." *Annual Review of Anthropology* 21: 491–516.
- Phillips, Anne, and Barbara Taylor. 1980. "Sex and Skill: Notes towards a Feminist Economics." *Feminist Review* 6: 79–88.
- Plankey-Videla, Nancy. 2012. We Are in This Dance Together: Gender, Power, and Globalization in a Mexican Garment Firm. New Brunswick, NJ: Rutgers University Press.
- Polanyi, Karl. (1957) 2001. The Great Transformation: The Political and Economic Origins of Our Time. Boston: Beacon Press.
- Prentice, Rebecca. 2012. "'No One Ever Showed Me Nothing': Skill and Self-Making among Trinidadian Garment Workers." *Anthropology & Education Quarterly* 43 (4): 400–414.
- Reno, Joshua O. 2016. Waste Away: Working and Living with a North American Landfill. Oakland, CA: University of California Press.
- Rival, Laura. 1998. "Androgynous Parents and Guest Children: The Huaorani Couvade." *Journal of the Royal Anthropological Institute* 4 (4): 619–642.
- Riviere, P. G. 1974. "The Couvade: A Problem Reborn." *Man* (n.s.) 9 (3): 423–435.
- Russ, Ann Julienne. 2005. "Love's Labor Paid For: Gift and Commodity at the Threshold of Death." *Cultural Anthropology* 20 (1): 128–155.
- Sanchez, Andrew. 2012. "Deadwood and Paternalism: Rationalising Casual Labour in an Indian Company Town." *Journal of the Royal Anthropological Institute* 18 (n.s.) (4): 808–827.
- Sanchez, Andrew. 2016. *Criminal Capital: Violence, Corruption and Class in Industrial India*. New York: Routledge.
- Sanchez, Andrew. 2018. "Relative Precarity: Decline, Hope and the Politics of Work." In *Industrial Labor on the Margins of Capitalism: Precarity, Class and the Neoliberal Subject*, ed. Chris Hann and Jonathan Parry, 218–240. New York: Berghahn Books.
- Sanchez, Andrew, and Christian Strümpell. 2014. "Sons of Soil, Sons of Steel: Autochthony, Descent and the Class Concept in Industrial India." *Modern Asian Studies* 48 (5): 1276–1301.
- Sennett, Richard. 2008. The Craftsman. New Haven, CT: Yale University Press.
- Stevenson, Lisa. 2014. *Life Beside Itself: Imagining Care in the Canadian Arctic.*Oakland: University of California Press.
- Strathern, Marilyn. 1999. *Property, Substance and Effect: Anthropological Essays on Persons and Things*. London: Athlone Press.
- Thompson, E. P. (1963) 1991. *The Making of the English Working Class*. Harmondsworth: Penguin.
- Thompson, E. P. 1967. "Time, Work-Discipline, and Industrial Capitalism." *Past & Present* 38: 56–97.

- Venkatesan, Soumhya. 2010. "Learning to Weave; Weaving to Learn ... What?" *Journal of the Royal Anthropological Institute* 16 (S1): S158–S175.
- Wacquant, Loïc. 2004. *Body & Soul: Notebooks of an Apprentice Boxer*. Oxford: Oxford University Press.
- Weiner, Annette B. 1992. *Inalienable Possessions: The Paradox of Keeping-While-Giving*. Berkeley: University of California Press.
- Wood, W. Warner. 2008. *Made in Mexico: Zapotec Weavers and the Global Ethnic Art Market*. Bloomington: University of Indiana Press.
- Wright, Melissa W. 2006. *Disposable Women and Other Myths of Global Capitalism*. New York: Routledge.
- Zaloom, Caitlin. 2006. Out of the Pits: Traders and Technology from Chicago to London. Chicago: University of Chicago Press.