Hospitality and prosumption

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Hospitality and the hospitality industry need to be reevaluated in the era of the new prosumer and smart prosuming machines. Traditional notions of hospitality hearken back to an earlier era and ongoing changes are forcing us to reconsider them. Among those changes are the decline of settings that offer hospitality; the decline of employment opportunities for workers in that industry; the decline in the opportunities to offer hospitality for the workers that remain; a decline in interest in hospitality on the part of consumers; the automation of hospitality; and the increasingly stratified nature of the hospitality industry. Overall, given the increasing affluence of the developed world, and of the elites in all parts of the world, the hospitality industry will survive. However, it will increasingly be bifurcated into a small number of settings that offer elites the kind of hospitality we traditionally associate with the industry and a vast majority of settings that offer what is best described as inhospitality to everyone else.

Keywords: Hospitableness, inhospitality, prosumption, smart prosuming machines, McDonaldisation

Introduction

Almost a decade ago I was asked to give a talk on the hospitality industry drawing on my work on McDonaldisation (Ritzer 2015), postmodern theory (Ritzer, 1977), and globalisation (Ritzer & Dean 2015), especially the ‘globalisation of nothing’ (Ritzer 2012). I have continued to write about those topics and there are many ways in which I could expand on the application of those ideas to the hospitality industry. However, what I will do here is further develop and apply a new strand of my work on the ‘prosumer’ to the hospitality industry (Ritzer & Jurgenson 2010). My interest in this topic derives, in part, from a brief section on ‘putting the customer to work’ in early editions of The McDonaldization of Society. There are many examples of this in the fast-food industry (such as customers being expected to clean up after themselves), as well as in the hospitality industry more generally. Such consumers who produce are one broad type of prosumer and the one that will be of primary interest here. The other type is the producer who consumes (e.g., who uses raw materials in producing a finished product). Those who work in the hospitality industry are such prosumers. For example, they produce a variety of services for their customers as they consume information, overtly and covertly, about what services are available and which services the customers want and how they would like to have them delivered. While the focus here is on consumers who produce, we will also reflect on corresponding changes in producers who consume in the hospitality industry. Before we can get to all of this, I need to explain my thinking on the prosumer.

Defining and conceptualising prosumption

As a term, prosumption is formed out of the combination of the concepts of production and consumption. In fact, prosumption is defined as the interrelated process of production and consumption. For much of recent history, especially since the Industrial Revolution, the popular and academic focus within the economy has been on production (e.g., Marx 1967, Veblen 1914/1964). More recently, especially since the end of World War II, the focus began to shift to the increasingly dominant process of consumption (e.g., Baudrillard 1970/1998; Galbraith 1964). While these are certainly important processes and worthy of continuing attention, the focus on one or the other has tended to obscure the fact that both are better seen as processes of prosumption. That is, much production takes place in the process of consumption; there can be no consumption without some production (e.g. of that which is to be consumed such as a home-cooked meal; or of the meaning of, for example, a home-cooked meal as opposed to one eaten in a fast-food restaurant or in a five-star restaurant). Similarly, much consumption is associated with the process of production (e.g., of the raw materials and labour-time needed to produce an automobile, and of the meanings of the work involved and of the automobile that is produced). Thus, prosumption (not production or consumption) is seen here as the generic process – one that subsumes production and consumption. Indeed, the latter, as we will see, should be viewed as extreme sub-types of prosumption.

Figure 1 offers a view of prosumption not as a single process (or phenomenon), but rather as a wide range of processes existing along a continuum. The poles of the continuum involve production redefined (a bit awkwardly, but more accurately) as ‘prosumption-as-production’ (p-a-p) and consumption as ‘prosumption-as-consumption’ (p-a-c). This means, among other things, that production and consumption, at least in their pure forms devoid of prosumption, do not exist on this continuum. There is no such thing as either pure production (without at least some consumption) or pure...
Traditionally, this awareness is produced when p-a-cs they ever enter a setting in which they can consume them. A meal at a cafeteria, a Big Mac at McDonald’s) long before awareness of, and desire for, various products (for example, producers (or working customers). P-a-cs are producing wait-staff and bus-persons.

For example, the late 19th and early 20th century cafeterias have been a long tradition of refining and expanding that work. For example, in putting hubcaps on a car in the assembly process, it takes time and energy not only to put the hubcaps on the car (the production phase), but also to retrieve them from where they are stored (the consumption phase). This distinction seems trivial, but it is important to the general conceptualisation of prosumption.

The same distinction between phases needs to be made for prosumption as consumption and in this case it is of much greater consequence, especially in today’s world. However, it is difficult to conceive of p-a-ps as producers. My earliest thinking on this issue was in my work on the McDonaldisation of society (Ritzer 2015), in a discussion of the ways in which fast-food restaurants are ‘putting customers to work’. Just as p-a-ps must consume, p-a-cs (prosumers-as-consumers) must produce as ‘producing consumers’ (Dujarier 2014) or ‘working customers’ (Rieder & Voss 2010). Of course, the process of putting customers to work was not invented by the fast-food restaurant. Customers have always worked in restaurant settings (e.g., in the most traditional of restaurants by, for example, reading and ordering from menus), but there has been a long tradition of refining and expanding that work. For example, the early 19th and early 20th century cafeterias led consumers to perform a wide range of tasks on their own such as retrieving trays, utensils, and napkins, lining up and wending their way through a line where they obtained the food they desired, and then paying at the cash register at the end of the line (Hardart & Diehl 2002). In traditional restaurants these tasks are performed by paid employees such as wait-staff and bus-persons.

There are a series of broader senses in which p-a-cs are producers (or working customers). P-a-cs are producing awareness of, and desire for, various products (for example, a meal at a cafeteria, a Big Mac at McDonald’s) long before they ever enter a setting in which they can consume them. Traditionally, this awareness is produced when p-a-cs encounter someone who has consumed something that they conclude they would like to have. In the contemporary context, this production of desire is even more likely to occur in encounters with advertisements about various products (Baudrillard 1970/1998, Schudson 1986). However the desire is produced, p-a-cs then must produce the actions required to get them to the brick-and-mortar location (or the web site) where the products are available for sale. Once there, the initial desire needs to be reproduced (or possibly altered) and translated into the more specific steps needed to actually obtain and purchase the product. While all of this is accomplished in cafeterias or fast-food restaurants, much additional work is required when consumers use the drive-through windows at fast-food restaurants. Among the required tasks are ordering the food at one point in the drive-through lane and picking it up at another; driving away with food and unwrapping it (likely in the car); and then disposing of the debris (engaging in the work of garbage disposal and saving the fast-food restaurant the expense involved in having paid employees do that work).

Much the same process occurs in other brick-and-mortar contemporary consumption settings such as, for example, Wal-Mart. First, a desire for a specific product (and there are many) on offer at Wal-Mart needs to be created by p-a-cs. More importantly, at least from Wal-Mart’s perspective, a desire to purchase that product there rather than from a competitor also needs to be created. Second, there is work involved in the trip, often lengthy, to Wal-Mart and the negotiation of the parking lot and entrance to the store. Third, once in the usually huge and labyrinthine store, p-a-cs must obtain carts and make their way through it to find what they came for. Inevitably, they will find and pick up other products that they did not have in mind before they arrived. Fourth, when they are done, they must pay for their purchases, increasingly by doing all of the work themselves at self-checkout lanes. Then, the purchases must be transported to (usually) one’s car and then home where additional work is needed to unload, unpack, and perhaps construct (as in the case of IKEA’s famous Billy Bookcase) the final product. Various steps are then required to use, and in some cases use up, that which was purchased. Throughout this phase of the process p-a-cs are doing much (re-) definitional work as they reassess the feelings that led to the initial desire to obtain the product. Once the product is gone (used up, disposed of, or relegated to a storage area), a final assessment occurs which may (or may not) lead to the same or similar purchases. If the assessment is a positive one, the process may begin again.

The above is little more than a brief sketch of the many acts that can be seen as being involved in the production phase of p-a-c. Given that, in what sense is there a consumption

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**Figure 1:** The prosumption continuum

**Figure 2:** The prosumption continuum with phases of production and consumption
phase of p-a-c? In what senses are p-a-cs consumers? These are much easier questions to answer since p-a-cs are what we usually consider consumers and it seems abundantly clear that they are engaged in the process of consumption. Much of what has been described above as production (e.g., the acts involved in using and using up products) is closely related to, if not indistinguishable from, consumption, or in the terms used here, the consumption phase of p-a-c. However, a distinction can be made between the steps taken to produce consumption and those involved in the consumption process itself. In most cases, these are simply different ways of looking at the same steps. For example, one produces the various steps involved in eating a bowl of cereal (getting the cereal box from the cabinet and the milk from the refrigerator; retrieving a bowl and a spoon; combining the cereal and milk in a bowl) at about the same time one actually consumes (eats) that cereal. Whether or not they are separated in time or place, the production and consumption phases need to be distinguished in order to make it clear that both occur in p-a-c (and p-a-p).

Prosumption in the hospitality industry

Given this conceptual background, we turn now to a discussion of prosumption in the hospitality industry. The conventional view in the hospitality industry (and in many other contexts, industrial and otherwise) is that people are involved in it as either producers or consumers of hospitality. Those who work in the hospitality industry (producers, workers) are expected to provide contexts that are welcoming and where hospitality is most likely to be on offer (say, a cruise ship, a theme park, a casino-hotel), as well as to be those trained to be hospitable and involved in creating and maintaining a hospitable environment. The consumers are expected to consume that hospitality within those contexts, as well as in activities created and run by the relevant employees. The consumers are not expected to produce much, if any, of the hospitality and the producers are not expected to consume very much except, perhaps, feedback from customers on how welcome they are being made to feel.

However, from the point of view of this analysis, this approach is based on, and fatally flawed by, the creation of a clear binary distinction between producers and consumers of hospitality. Both consumers and producers are indeed always been prosumers of hospitality. This is true whether they are to be found at the p-a-p or p-a-c ends of the prosumption continuum, or anywhere in between. The degree to which they prosume hospitality, the degree to which they produce (p-a-p) and consume (p-a-c) it, varies depending on their position on the continuum, but all of them are involved in prosumption. Those at the p-a-c end do more of what is traditionally thought of as consumption than production and the reverse is the case for those on the p-a-p end; consumption and production are more evenly balanced for those in the middle. It would be useful to examine the full range of prosumption processes in the hospitality industry and, more generally, to take a whole new look at the industry from that perspective. However, such an analysis would require far more than a single paper.

In any case, my main interest is inhospitality, not the hospitality industry in general. The primary concern here is a more limited analysis of the ways in which looking at the industry from the perspective of prosumption contributes to our understanding of the inhospitality that increasingly dominates it, especially some of its most recent manifestations.

We begin with p-a-c. Those whom we have traditionally thought of as consumers (even though they have always been prosumers) in the hospitality industry have increasingly and more clearly become prosumers (p-a-cs) of hospitality. Most generally, this means that instead of having services performed for them by workers (p-a-ps), p-a-cs (guests) are increasingly producing those services, or at least some aspects and portions of them, more-or-less on their own. This represents a severe challenge to the traditional notion of hospitality as involving, indeed necessitating, others (p-a-ps) helping, entertaining, protecting and serving their guests. Hospitality is typically seen as a one-directional process from the person being hospitable to the consumer of that hospitality. In other words, the consumer is generally seen as a passive recipient of hospitality.

Take, for example, the characteristics of ‘genuine hospitality’ identified in a bank of questions on the topic created by Bain and Lashley (2014). Most of those characteristics put the burden for hospitality on the producer, on the production of hospitality. For example, ‘I do whatever is necessary to ensure that guests have a good time’, ‘I enjoy taking responsibility for the wellbeing of guests’, ‘It means the world to me when guests show their approval of my hospitality’, ‘I seek out opportunities to help others’, etc. However, those who make these kinds of statements are not just producers of hospitality, they are also consumers, especially of what their guests are doing and feeling (as well as recent developments in the hospitality industry). From the point of view of prosumption, the need for those in the hospitality industry to consume information about guests should receive more attention in that industry, as should techniques that would help them enhance guests’ experience based on that information.

More importantly, far more attention needs to be devoted to the guests as prosumers of their experiences. In the terms of a related perspective on prosumption, guests need to be seen as co-creators of hospitality and hospitable experiences (Prahalad & Ramaswamy 2004). Indeed, it could be argued that they play a greater role in creating hospitable experiences than those who work in the industry. Their satisfaction depends, in part, on creating hospitable experiences in the ways that those in the industry expect them to be created. More importantly, it hinges on their ability to create all sorts of activities and meanings that serve to make their experiences more meaningful, as well as meaningful in ways that those in the industry might not have anticipated.

The focus in the hospitality industry needs to be on creating contexts in which p-a-cs can freely create all sorts of meaningful experiences for themselves with the help, of course, of hospitality workers and the hospitality setting. Perhaps above all, the contexts created in the hospitality industry should not restrict that creative process. Further, in their efforts to be hospitable, those who work in the industry should not restrict the efforts by p-a-cs to create what they consider to be hospitable experiences.

In other words, the hospitality industry adopts a far too passive image of its p-a-cs. The p-a-ps in the industry seek to create hospitable experiences for p-a-cs rather than encouraging them to be actively involved in their creation. P-a-cs should also be encouraged to create such experiences on their
own, or at least to go beyond those created by the p-a-ps. The passive view of p-a-cs in the hospitality industry is challenged by the concept of the prosumer which assumes that consumers (p-a-cs) are always active producers of what they consume. It is also challenged in other bodies of work such as studies of audiences in general and fans in particular, as well as in recent works on brands.

One example in terms of audiences is Stuart Hall’s (1980) work on encoding and decoding. Broadcasting structures such as those associated with television emit ‘encoded’ messages embedded in specific programmes. However, to have an effect, these programmes and their meanings must be ‘decoded’ by the audience. In other words, the audience must do interpretative work in order to understand the meanings of a TV programme and for those meanings to have an effect on them. Indeed, the objective fact of TV discourse (p-a-p) and the subjective interpretive work of the audience (p-a-c) cannot be clearly separated from one another; they are dialectically related. Thus, Hall rejects the idea, associated with the Frankfurt School, of the power of the media and their control over the audience.

According to Dallas Smythe (1977, 3) under monopoly capitalism ‘all non-sleeping time of most of the population is work time’. Included in the ‘work’ done during this period is ‘essential marketing functions for the producers of consumers’ goods’ (Smythe 1977, 3). Advertisers are seen as buying the marketing services of the audience. Audiences work for advertisers by creating the demand for their products. They ‘learn to buy particular “brands” of consumer goods, and to spend their income accordingly’ (Smythe 1977, 6). In so doing, they ‘complete the production process of consumer goods’ (Smythe 1977, 6).

Within media studies, but specifically focused on ‘fans’, is the work of Henry Jenkins (2006). In his early work on textual poachers, Jenkins takes on the idea that fans are ‘brainless consumers’. Textual poachers, following de Certeau (1984), are seen as those who extract from texts that which they find useful or pleasurable and use those extracts to create texts of their own. However, the term ‘poachers’ better reflects the media realities of the early 1990s than it does today. That is, the media owned and controlled the means of producing texts and fans had to poach them in order to produce their own texts. However, in the age of the internet the media have much less control over those means of producing texts and fans exercise greater control over them and are able to produce texts largely on their own (e.g. on blogs, Facebook pages, or Twitter).

In the process of writing Textual Poachers, Jenkins developed the broader idea of participatory and convergence culture which inform much of his more recent work. Participatory culture is one where fans (a main concern in Jenkins’s work) are not mere spectators but active participants; fandom is a specific form of participatory culture. In convergence culture the interaction of the powers of the media producer and the media consumer has unpredictable consequences. His primary interest is to counteract the idea of the passive media spectator with the ideas of spectators performing work and as consumers engaged in active participation. This is especially the case with new technologies empowering audiences who are demanding the right to participate.

This process is also clear in the case of brands, where consumers play a major role in producing the shared meanings that are the brand; they do not simply accept the brand messages created by marketers and advertisers. Thus, in a real sense prosumers produce the meaning that surrounds brands such as McDonald’s, BMW and Nike. Arvidsson (2005, 237) refers to these prosumer (although he doesn’t use this term) creations as an ‘ethical surplus’, or a ‘social relation, a shared meaning, an emotional involvement that was not there before’.

All of this work is in tune with the view that people (guests) are not passive consumers of hospitality, but are its active co-creators. Specifically, p-a-cs play an active role in being helped, entertained, protected and served by others. Instead of focusing on how to do these things for their customers, the hospitality industry needs to become more active in finding ways to get p-a-cs more involved in being helped, entertained, protected and served. The more active involvement of prosumers (p-a-cs) in hospitality will not only enhance these processes, but lead prosumers (p-a-cs) to be more satisfied with them because they will see the active role they are playing in them. Furthermore, more active involvement by p-a-cs will lead to the discovery and institutionalisation of new forms of hospitality; p-a-cs can be a good source of innovation. A traditional, one-directional, top-down model of hospitality becomes increasingly inappropriate, if not impossible, as consumers are seen as prosumers.

Furthermore, there are an increasing number of situations in the hospitality industry where there is no other, or at least the role of the other is greatly reduced. If there is no other (no service provider), then there can be no real hospitality. The only possible source of this hospitality is the p-a-c. While being totally on one’s own as a p-a-c is rare, p-a-cs are certainly increasingly on their own in settings in which we have traditionally expected to be treated hospitably by p-a-ps.

In her typology of ‘consumer work’, Dujarier (2014) labels this the ‘self-service work’ performed by prosumers. Examples include:

• automated systems for answering phone calls at hospitality settings, where the caller is required to make a series of choices rather than having an employee make the choices for them
• self-check-in kiosks at motels, airports, etc.
• self-service in fast-food restaurants
• self-serve buffets on cruise ships, in casinos, chains of restaurants based on buffets
• self-service breakfasts at motels including toastng one’s own bagels, making one’s own waffles
• being asked to clean up after oneself before one’s airplane lands
• playing slot machines (and other automated gambling games), where the gamblers (consumers) produce their own games, as well as the payouts from those games.

In all of these examples, the prosumer produces outcomes, does work, which was formerly done for them. That work was often performed in a hospitable manner, or at least was an occasion in which hospitality could be offered and displayed. If the opportunities to perform these tasks are eliminated, so too are expressions of hospitality emanating from hosts to guests. The hospitality that is offered in these contexts is inauthentic. It likely comes from such sources as computerised voices,
canned messages on video screens, and employees who are more likely than not following scripts. As p-a-cs, people can, at least theoretically, make such greetings seem more genuinely hospitable. However, those efforts are likely to be greatly limited, if not doomed to failure, without interacting with a fully functioning human being (p-a-p).

A related problem involves the creation of settings – what I have called ‘cathedrals of consumption’ (Ritzer 2010) – where the hospitality is frequently artificial, inauthentic and built into the structure rather than being extended by others (p-a-ps). Examples of this are legion, such as being told to ‘have a nice day’ as one leaves many of these cathedrals of consumption or when one has highly scripted interaction with costumed characters at Disney World. More generally, settings such as the drive-through window are supposed to be structured to be welcoming so there is supposedly little need for anything but the scripted interaction with costumed characters. Nevertheless, visitors are prosumers and they are busy in those contexts creating many things about what goes on there, including the sense that they are welcome. Unfortunately, this is largely a one-sided construction; the p-a-cs are on their own with little or no help from p-a-ps.

While these structures are artificially hospitable, there are aspects of them, or of other structures, that are downright inhospitable. The truth is that p-a-cs are not welcome in, for example, fast-food restaurants, or at least they are not welcome to stay very long. In the hopes that p-a-cs would leave quickly, McDonald’s famously created chairs designed to make customers uncomfortable after 20 minutes. More telling is the inhospitable drive-through window. It is designed to prevent anything but the most fleeting and scripted hospitality (if one can call it that). In fact, it is designed to not only keep those troublesome p-a-cs – and any need to be hospitable – out of the restaurant, but also the garbage they create, which, in the case of the drive-through window, they take with them as they leave. By the way, in doing so, the consumer of the restaurant’s products also become the producers of garbage disposal; they become prosumers (p-a-cs) in yet another way.

While there is a general trend in the direction of inhospitality, there are also profound differences among and within hospitality settings in terms of the degree of (in)hospitality offered. To put this in sociological terms, hospitality settings are highly stratified. In addition, within any given setting there is considerable stratification in terms of the services received and the ways in which they are offered. The basic point is that the less well-off are those who are more likely to use the kind of self-service systems described above and as a result are likely to receive little or no hospitality from p-a-ps. Even when they are in more traditional settings (restaurants such as Olive Garden) where services are offered by other humans, they are likely to receive little in the way of hospitable treatment.

In contrast, the well-to-do are less likely to be in contexts where self-service is the norm. Rather, they are likely to be in settings where services are provided to them and in a highly hospitable manner. Compare a fast-food restaurant to a three-star Michelin restaurant; a cruise on a Princess (or, heaven forbid, a Disney) cruise ship to one on a Seabourn ship; a casino in downtown Las Vegas to the one in the Mandarin Oriental on the Strip. There is also internal stratification within many hospitality settings where those who can afford it still receive a great deal of hospitality; things are done for them rather than being asked to do the tasks themselves. Examples include private rooms in elite restaurants; separate, high-stakes gambling rooms in casinos; concierge floors and service in hotels; and first-class compartments on airlines and cruise ships.

In fact, as hospitality declines and disappears, at least for those who are not societal elites, most consumers will forget, or never come to know, hospitality as it has existed in various settings. For example, how many airplane passengers remember, or have even experienced, the hospitality that was at one time offered to passengers in an economy class cabin? Who remembers that economy passengers generally felt the need to ‘dress up’ in order to fly economy (or any other) class? Furthermore, many have come to the view that the lower prices (or is it greater profits) that they have been led to think are associated with less (or no) hospitality are preferable to better service. As that kind of thinking spreads, where does that leave the hospitality industry?

The fact is that there has always been an elitism built into that industry (and most others). Most people in the world, even in the developed world, rarely if ever experience the offerings of the hospitality industry. As a result of ongoing changes, especially the rise of smart prosuming machines (see below), we can expect what we have traditionally considered to be hospitality to be offered to an ever smaller, increasing elite, population. Whatever we may think about elitism, this means less work in the hospitality industry or at least less work for those with the interpersonal skills and knowledge base historically associated with those who work in that industry (concierges, wine stewards) and who offer hospitality.

The inhospitality of the hospitality industry reaches its logical extreme on the internet. No hospitality is expected or possible when the p-a-c uses the online reservation systems for airlines, hotels and motels or buys an array of products from Amazon.com and other online ‘cathedrals of consumption’. The p-a-c, of course, does all of the work associated with those reservations and purchases and, more generally, with all online systems. For example, choice of airlines, airline routes, prices, seating (and much more) are left to p-a-cs operating on their own, as is all of the work involved in actually making the choices. The systems, of course, are not constructed to be hospitable. In fact, they are constructed to be as daunting to the prosumer, as inhospitable, as possible in order to ward off requests or questions from those who use the system.

There is no helping hand on those systems let alone tangible assistance. Gone (at least in most cases) are the helpful employees in travel agencies (as well as in local bookstores or hardware stores). In addition, it is difficult to contact human beings about issues or problems with those online systems and even if one could, they are unlikely to be hospitable. The same is the case with online casinos and other gambling systems. Without any human beings to deal with, it is impossible for the p-a-c to receive, or even expect, much in the way of hospitality, if any at all.

**Smart machines and the new prosumer**

While prosumption is a primal process (Ritzer 2014), it has taken new forms and acquired much greater significance today, in part as a result of various technological changes (Ritzer, forthcoming). As a result, we can think in terms of a ‘new prosumer’. Furthermore, businesses (and other
organisations such as the government and, for example, its use of citizens to fill out their own census forms rather than having the work done by census takers) seem to have grown more aware of this phenomenon and are creating conditions to expedite and exploit it. Businesses (and others entities such as the government) are in the main not doing this with an explicit notion of the prosumer in mind, but they are aware of the specific manifestations of prosumption in the operations in which they are involved. As we have seen, the many recent examples of prosumption in the hospitality industry make it clear that it, too, is operating, at least implicitly, with a sense of the new forms of prosumption and their significance to the industry.

One thing we will see more of in general, and specifically in the hospitality industry, is the use of more ‘smart prosuming machines’ (Ritzer, forthcoming). This is part of the trend away from human to non-human technology. This trend is important in itself and more specifically for what it means for the hospitality industry. Before we get to that, we need some introduction to these machines and their relationship to prosumption.

**Smart machines and prosumers-as-producers**

Smart machines and automation alter and in many ways improve the process of prosumption-as-production. In many cases they make p-a-p easier by conceptualising and performing tasks that are quite onerous to human workers such as welding and painting cars on automobile assembly lines. However, they also can be seen as deskilling work by taking skills from humans and building them into the technology. Thus, there are plusses and minuses as far as the implications of these changes for p-a-p are concerned. At the extremes, however, smart machines (Kelly and Hamm 2013) can, and increasingly will be able to, replace human workers (the p-a-cs). In fact, the literature on producers, or in our terms p-a-ps, has been primarily concerned with the issue of job loss as a result of their introduction and the subsequent expansion of smart machines (Brynjolfsson & McAfee 2014).

Smart machines will themselves become p-a-ps through the use of sensors that will, for example, ascertain that there are problems with a particular phase of the production process (a part does not meet specifications; the paint on the car is the wrong color or applied unevenly) or even with a finished product. Eliminated in these cases, at least in part, is the need for human p-a-ps to make these judgments (involving further deskilling). Because of the reduced need to take time to attend to such matters, fewer human employees will be needed. Reductions in the number of workers are also occurring, and will occur more frequently in the future, as smart machines literally do the work themselves without human intervention. Such robotisation has already occurred in many production settings, including, among others, BMW’s automobile assembly line in Munich where robots put fenders on cars, weld and paint the cars, and so on.

Overall, the increasing sophistication and utilisation of smart machines in p-a-p has been going on for some time and has been the subject of much analysis, albeit not from the perspective of prosumption. When we look at it from that point of view, we can see that both the production and consumption phases of p-a-p are affected by smart machines and automation. In the case of automobile production, today’s robots both pick up (consume) a fender needed by the car under construction and put the fender on the car (produce). An understanding of prosumption adds greater nuance to our understanding of what is transpiring since both the consumption and production phases of p-a-p are profoundly altered by smart machines and automation.

More directly relevant to the hospitality industry is the use of smart machines in the banking industry where ATMs do the work rather than tellers. Then there are the self-checkout systems in supermarkets, where p-a-cs do all of the work of unloading their carts, scanning their purchases and then their credit cards, bagging their purchases and then carrying them to their cars. The same is true at self-service gasoline stations. All of this reduces the need for p-a-ps and changes the nature of the work for those workers who remain.

Of more recent vintage are the various kinds of kiosks used by p-a-cs in lieu of interacting with and making arrangements with service workers (p-a-ps). This is most obvious in such kiosks in the airline and hotel industries, but they are proliferating elsewhere, including the fast-food industry. In some cases the p-a-c encounters such kiosks on entry to the restaurant and in others, most notably Chilis (and Applebees), there are wireless, tabletop, touch-screen tablets (manufactured by Ziosk) at the table where p-a-cs order food and drink, and can even scan their credit cards to pay the bill, without interacting with waitpersons. In order to prevent p-a-cs from growing bored, they can even play games on those computer terminals (at an additional cost). Chilis insist they are still in the business of ‘service’ and offering hospitality. The chain contends that the terminals will never replace human servers, but one is forced to wonder about such an assertion in the long run. There are already automated Sushi restaurants where p-a-cs make their selections on their own from a conveyor belt with various options passing before them. Bills are calculated automatically on the basis of the different types of plates used; there are even sushi restaurants where p-a-cs can deposit their used plates and have their bill calculated automatically.

Of course, we are in the infancy of the development of smart machines, especially in the hospitality industry. As they grow increasingly sophisticated, they will acquire a greater ability to ‘think’ on their own and to take on more tasks now being handled by human p-a-cs. Thus, it is easy to predict that smart machines will do more things, gain more control over people, and eventually replace many – perhaps even all – of them in the workplace. It is clear that we will see greater use of smart machines in the obvious areas of the material production of automobiles. They will also be employed to an increasing degree in the service industries in general and the hospitality industry in particular. They will perform some hospitality functions on their own and in other cases supplement the work of human hospitality workers.

However, given the greater complexity of hospitality work compared to the work in the automobile industry, it is difficult to see smart machines playing anywhere as great a role in the hospitality industry. We have mentioned above various technologies already in use in the hospitality industry (e.g. self-check-in technology) that can be seen as smart machines. In some cases they do replace humans, but what they cannot do is offer the genuine hospitality that can be offered by p-a-ps in the hospitality industry. We will see further incursions of smart machines into the hospitality industry and they will be
programmed to offer something closer to traditional hospitality (we can even envision robots simulating the work of those in the industry), but it is impossible to think of that as anything like what we have traditionally thought of as hospitality. While genuine human hospitality will continue to be offered by p-a-ps to elite p-a-cs, and may even be enhanced, we will need to rethink what we mean by hospitality for the vast majority of p-a-cs. It may well be that for most hospitality will be a thing of the past – what most p-a-cs will deal with increasingly is the inhospitality industry.

In the end, looking at producers as p-a-ps in the hospitality industry (and everywhere else) in general, and specifically in their relationship to smart machines, does not really add a great deal to our understanding of what is happening, and is likely to happen, to them. This is because much of this has been studied and thought about under the heading of the automation of production. Where adding prosumption to this analysis is most illuminating is in the case of what we traditionally think of as consumption (p-a-c). It is p-a-c that is now in the process of being altered dramatically, including and maybe especially in the hospitality industry, by smart prosuming machines.

**Smart machines and prosumers-as-consumers**

Much more attention has been paid to producers (or in our terms, p-a-ps) than to consumers (p-a-cs) because of the long-term ‘productivist bias’ in the social sciences. More specifically, the possibility of a major change in the nature of work, and more extremely of substantial job loss, has had far greater priority than changes wrought in the consumption process (although these two sets of changes are, as we’ve seen, closely connected). Furthermore, the focus on production has led to earlier, quicker and more dramatic applications of smart machines to p-a-p. It is clear that as a result of the development and use of such machines, much work can be performed more quickly and efficiently, yielding greater profits. It has not been nearly as clear that increased use of smart machines in p-a-c will lead to greater profits. It is also the case that it is far easier to bring in smart machines to change what p-a-ps do than it is in the case of p-a-cs. Because p-a-ps are generally paid employees, employers can more easily implement whatever innovations they deem necessary with little or no resistance from employees. However, p-a-cs are not employees; they are not being paid. Businesses, especially those in the hospitality industry, cannot afford to anger or alienate them by imposing smart machines (or at least too many of them, too often, and in the wrong contexts) on them. The implementation of such technology in p-a-c has to be done much more subtly. Furthermore, these kinds of changes need to please, or at least seem to please, p-a-cs (the consumers in the hospitality industry) while there is no such requirement in the case of p-a-ps (those who are employed by the industry). Thus the introduction of smart machines in p-a-c tends to be done covertly or to be made to seem highly appealing by, for example, offering quicker service and/or lower prices. While the changes in p-a-c may seem less important than changes in p-a-p, it is in p-a-c that the biggest changes are being made, and are likely to be wrought, by the increasing number and sophistication of smart prosuming machines.

The human p-a-c is beginning to be controlled, and perhaps eventually replaced, by smart machines or, more specifically, **smart prosuming machines**. Critical here is the development of increasingly powerful sensors (using nanotechnology) that can be attached to objects worn by (‘wearables’), or otherwise associated with, p-a-cs.

Take, for example, driving on toll roads and the hospitality workers who staff the toll booths. Instead of producing money to pay the toll needed to consume more miles on a toll road (and being greeted by the toll taker), e-tolls allow people to glide by or through toll-taking areas and have the charge debited electronically to their E-Z pass accounts. This is made possible by smart technology at toll areas and transponders in cars. On some roads no humans work any longer in toll-taking areas. Thus, drivers who do not have an E-Z pass or the correct change will automatically be sent a bill or ticketed. Transponders also allow cars, as well as other types of vehicles (e.g. tractor trailers) subject to different charges, to be identified automatically. This is a domain in which the replacement of human hospitality workers by smart presuming machines has already occurred and will expand in the future. It is also a domain in which the p-a-cs have already acquiesced by obtaining and using those transponders. The only hospitality those p-a-cs are likely to experience is an automated display thanking them and suggesting they ‘have a nice day’ as they drive through.

Universal product codes (UPCs) have already altered dramatically the nature of prosumption in a wide range of cathedrals of consumption and they have the potential to change it much more in the future. For example, instead of p-a-cs unloading products to be scanned at the checkout counters at supermarkets, Wal-Mart, or IKEA, the UPCs associated with those products can be read directly by the computer as one checks out. Alternatively, the shopping cart can be equipped with a transponder that reads the UPCs during the process of shopping. Final bills can be tabulated automatically and be ready for shoppers as they leave the store or the bills can be e-mailed to them. It will soon be possible for a p-a-c to shop in a supermarket (and elsewhere) without encountering hospitality workers, let alone any hospitality.

3-D printers involve smart technology that consumes information (for example, blueprints), as well as raw materials (for example, plastics), and uses them to produce automatically an increasingly wide variety of end-products (Anderson 2012). To the degree that our homes or other settings become production locales is the degree to which people will no longer need to venture into settings of consumption where hospitality is possible.

Perhaps the best example of the use of smart prosuming machines in the hospitality industry is, not surprisingly, to be found in Disney theme parks and its ‘magic bands’. According to Disney’s website: ‘MagicBands are innovative all-in-one devices that you can use to enter Disney theme parks, unlock your Disney Resort hotel room, use the FastPass+ entrance for attractions and entertainment experiences you selected, charge purchases to your room, and link Disney PhotoPass photos to your Disney account.’ Visitors receive a ‘MagicBand’ when they stay at a Disney Resort hotel and/or are a Walt Disney World Passholder. Those who are not staying at a Disney Resort hotel and/or are not a Passholder receive a card when they purchase park admission. They can also purchase a
‘MagicBand’ at Disney theme parks and the Downtown Disney area. As a result of ‘MagicBands’, visitors will be less likely to encounter hospitality workers on entering the park, on checking into hotels on the grounds, in gaining entry to their hotel rooms, on entering and paying for various attractions, etc. The result will inevitably be fewer hospitality workers and fewer opportunities to offer – or experience – hospitality.

The bands can also be used to enhance inauthentic hospitality experiences. For example, hidden sensors can be used to allow an employee dressed up as Mickey Mouse to greet children by name and wish them ‘Happy Birthday’. The bands can be used to track visitors as they move through the park, which attractions they enter, and what they purchase. Such information has ominous implications in terms of surveillance, but more prosaically it can be used to sell more souvenirs, food and attractions to visitors. While wearables like Disney’s ‘MagicBands’ have not yet proliferated widely in the hospitality industry, it is highly likely that they will. They are naturals for cruise ships and casino-hotels, among other places. Those cathedrals of consumption already have multi-purpose key cards that can not only be used to enter one’s cabin or room, but also to pay for various amenities during one’s stay. It is but a short step from those cards to something like Disney’s ‘MagicBands’.

**Smart prosuming machines and the irrationality of rationality**

There are, of course, numerous advantages to the rise of smart prosuming machines in general and more specifically in the hospitality industry. However, these non-human technologies can also be discussed under the heading of the ‘irrationality of rationality’ (Ritzer, 2012). Clearly the prosuming machines discussed above are highly rational technologies. However, like all forms of rationalisation, they produce, and are accompanied by, a wide range of irrationalities. For example, they can fail to operate properly causing, at the minimum, inconvenience (e.g. getting a ticket because one does not have the correct change needed at an automatic toll booth which offers no other way to pay the toll).

It may well be in the hospitality industry that these irrationalities reach their logical extreme. Among other things, they threaten to reduce the need for people in the industry, to reduce the need for those who remain to be hospitable, and to threaten the industry as a whole, at least as it is now constituted. These threats exist not only because smart prosuming machines do more and more things on their own, but also because prosumers (p-a-cs) themselves are increasingly operating without any assistance.

Irrationalities such as these do not mean that we need to be reactionaries standing against the increasing autonomy of p-a-cs, or Luddites opposing and rejecting smart prosuming machines. Clearly, they bring with them many advantages, but we should not ignore the irrationalities associated with them, as well as with many other aspects of our increasingly rationalised (or in my terms, McDonaldised) society.

While smart prosuming machines will increase in number and diversity and become more important in coming years, human prosumers will not disappear. They will continue to work, albeit in smaller numbers, in settings dominated by p-a-ps, albeit more as monitors and minds of those prosuming machines. P-a-cs will continue to consume (really prosume) but the nature of that process will be altered radically by smart prosuming machines. Most generally, the synergistic employment and exploitation of p-a-ps, p-a-cs and prosuming machines will lead to a radically different economic system that has the potential for unprecedented profitability because, primarily, of the decline of paid human employees, including those in the hospitality industry and who offer hospitality.

**Rethinking hospitality in the age of the ‘new prosumer’ and smart prosuming machines**

In conclusion, the whole notion of the hospitality industry and of hospitality in general needs to be re-evaluated in the era of the new prosumer and smart prosuming machines. It seems clear that the traditional notions of hospitality hearken back to an earlier era and ongoing changes are forcing us to reconsider hospitality (and much else). Among the issues pointed to by this analysis are:

- the decline of settings that offer hospitality
- the decline of employment opportunities for hospitality workers
- the decline in the opportunities to offer hospitality for the hospitality workers that remain
- a decline in interest in hospitality on the part of consumers
- the automation of hospitality and whether what such automated systems offer is ‘true’ hospitality
- the increasingly stratified nature of the hospitality industry.

Overall, given the increasing affluence of the developed world, and of the elites in all parts of the world, the hospitality industry will survive. However, it will increasingly be bifurcated into a small number of settings that offer elites the kind of hospitality we traditionally associate with the industry and a vast majority of settings that offer what is best described as inhospitality to most of the rest of us.

**Notes**

1 While the traditional terms of production and consumption are employed here for the sake of simplicity and clarity, these phases should also be seen as being subsumed under the heading of prosumption. In addition, while these phases are depicted as if they are separate and distinct, in fact that they almost always occur in conjunction with one another.

2 Throughout this paper I will use p-a-p (prosumption-as-production) and p-a-c (prosumption-as-consumption) to designate prosumption processes and p-a-ps (prosumers-as-producers) and p-a-cs (prosumers-as-consumers) for those who engage in those processes.

3 They can also even be inserted in the body of the prosumer, although that is highly unlikely in the hospitality industry. A bit more likely is the insertion of sensors in employees (p-a-ps). One Silicon Valley scientist says: ‘The reason we are talking about wearables is because we are not at implantables yet’, but ‘I’m ready. Others are ready’ (Ortutay 2014, 3d). Implanted prosuming machines would serve to turn prosumers into a new type of cyborg (Haraway, 1991).

**References**
