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The Relevance of Consumption in Niklas Luhmann's Theory of Society

Kai-Uwe Hellmann and Marius K. Luedicke

Abstract

Since Jean Baudrillard, many consumer researchers consider consumption to be universally relevant. In late modern societies, they tend to argue, consumption is everything and everything can be understood as consumption – similar to the “economic imperialism” debate some decades before. In this chapter, we problematize this perspective on the basis of Niklas Luhmann's general theory of society. We first introduce Luhmann's understanding of “audience roles” in the modern, primarily functionally differentiated world society and show then where he situated the consumer role within this society. Then we adopt this theoretical lens to explain why the universality thesis probably underestimates the successive risks if the consumer role would have already colonized society so broadly and imposed its perpetual quest for experiences and pleasures upon all functional systems outside of the economy. We conclude by raising critical questions about the consequences that such a colonialization and a resulting functional de-differentiation could have for modern society.

1 Consumption is Everything is Consumption

A remarkable amount of international contemporary consumer research studies assumes that consumption has achieved a state of universal relevance. Mike Featherstone (1983: 4), for example, observed a „gradual extension of consumerism to more and more sectors of the population“, while Don Slater (1997: 25) stated that „values from the realm of consumption spill over into other domains of social action, such that modern society is *in toto* a consumer culture, and not just in its specifically consuming activities.” Steven Miles (1998: 1) even asserted that „Consumerism is ubiquitous and ephemeral. It is arguably *the* religion of the late twentieth century. It apparently pervades our everyday lives and structures our everyday experiences and yet it is perpetually altering its form and reasserting its influence in new guises.”

However, Featherstone, Slater and Miles were not the first to claim such universality. Decades earlier, Kenneth E. Boulding (1945: 13) had already argued that it „is no exaggeration to say that consumption is the most important and intractable problem of mature capitalism.” Ten years later, Victor Lebow (1955: 7) noted that the „measure of social status, of social acceptance, of prestige, is now to be found in our consumptive patterns. The very meaning and significance of our lives is today expressed in consumptive terms.“ Until today, a range of influential authors has joined this line of arguing, considering consumption as part and parcel of society as a whole, rather than merely a specific social form within the economic system (Riesman et al. 1950; Bell 1976; Featherstone 1991; Lury 1996; Slater 1997; Miles 1998, 2015; Bauman 1998, 2007; Vincent 2002; Zukin/Maguire 2004; Schor 2006).

In these writings, what is growing is not only the list of practices associated with consumption, but also the list of social spheres in which consumer expectations and practices are playing a key role. Individual-level consumer research has broadened its scope, for example, from studying searching, purchasing, usage, and disposition behaviours to also include individual consumer fantasies, daydreams, and imaginations (Hirschman/Holbrook 1982; Holbrook/Hirschman 1982; Campbell 1987; Miller 1995; Ratneshwar et al. 2000, 2005). Moreover research in non-economic fields has begun to explore whether certain offerings that were originally provided without consumers' expectations in mind—such as education, church services, health

care, political elections or scientific teaching—are also becoming consumable commodities. Those new sectors in which consumption begins to play a role include art, education, health care, intimacy, mass media, politics, religion, science, and sports. Because patients, „parents, pupils and passengers have all been re-imagined as customers” (du Gay 1996: 77) by contemporary social theorists, consumption seems to have become universal. But can that be true? What would it mean for the organization of society as a whole, if more and more patients, pupils, students, or voters considered themselves as, and behaved like, consumers or even customers?

In this article, we draw on Niklas Luhmann’s theory of the modern, primarily functionally differentiated society as a theoretical lens to explore the possibility of the consumption literature portraying a world of universal consumption that does not (yet) exist. To do so, we first sketch out the pillars of Luhmann’s general theory of society. We then explain his theoretical distinction of service and audience roles, focussing particularly on (post-) modern consumption as a specific kind of audience role. Lastly, we adopt this Luhmannian perspective to challenge the universality of consumption thesis and to raise important questions about the consequences that it could have for society as well as our theory of societal organization if this thesis was (to become) true.

2 Luhmann’s Theory of The Functionally Differentiated Society

Since the 19th Century, when the modern society already emerged and developed its current gestalt, sociologists reflected upon its epochal singularity. From the beginning of this analytical venture, scholars studied the modern society either as class-based and stratified—based on social inequality—or explored a specific form of internal differentiation through which this occidental society fulfils the functional requirements of organizing human life (Giddens 1973; Alexander and Colomy 1990). Herbert Spencer was probably the first one promoting that social evolution must be understood as an on-going process of permanent specialization and differentiation. Almost simultaneously Karl Marx and Friedrich Engels distinguished between the economic base and a complex, highly differentiated superstructure. At the end of this century Émile Durkheim published his seminal study „De la division du travail social“ where he analysed the his society explicitly as functionally differentiated. Decades later Talcott Parsons adopted this perspective, also inspired by Max Weber’s thoughts on different value spheres of modern society.

Niklas Luhmann (1982, 1987, 1997, 2012, 2013), the protagonist of our chapter, decided to spend his academic career on developing a theory of the modern society, a society that he considered first and foremost as functionally differentiated. For Luhmann, functional differentiation meant that society takes care of specific social tasks that require continuous observation and administration by evolving sub-systems that take care of these requirements. Unlike Parsons (1951), who thought of functional sub-systems as integrated through shared societal norms, Luhmann theorized functional sub-systems as autonomous and autopoietic, that is, as able to produce the means and meanings required for their perpetuation independent from other systems (Bailey 2006). The total number is still debated, but scholars tend to agree that arts, education, economy, health care, law, mass media, politics, religion, science and sports are such autonomous sub-systems of modern societies that perform the majority of tasks for organizing their respective domains.

Each of these functional sub-systems evolves its own operating logic, relies on its own history, produces its own legitimacies and rationalities that make it not only unique, but also non-substitutable. This means that every system “observes” (in Luhmann’s terminology) society so differently and, most importantly, selectively, depending on the scope of the system’s responsibility for society that it can not be replaced by another social system: It is the one and only. For example, the law system does normally not decide what is and is not art, nor does the economic system normally interfere with what is taught in the education system (except from regularly complaining about a lack of business education in schools). But when sentences are passed, or goods and services are exchanged for money anywhere in modern society, the law and the economy are the only systems that provide the functional specific logic, procedures, and legitimacy.

An important facet of Luhmann’s concept of modern society is that sub-systems decide about everything inherent to them autonomously, including whom they allow to join and under which conditions. This brings us to Luhmann’s question about inclusion in general and service as well as audience roles in particular.

3 Service and Audience Roles of the Functional Sub-Systems

Again it was Parsons (1951) who first developed the idea that the encounter of a medical doctor and a patient is structured by a set of complementary, yet asymmetric roles. Doctors and patients both tend to act according to the specific expectations of the health care system, with the service role of the doctor being structurally advantageous compared to the patient role, similar to the seller being advantaged compared to the buyer as David Akerlof (1970) analysed it. That is, in order to function properly, patients are required to devote themselves to the system’s logics and procedures, for example, by waiting, undressing, or answering questions as demanded, and trusting almost blindly that the medical procedures are configured in ways that doctors can ensure a rapid healing.

Niklas Luhmann and others have adopted the idea of service and audience roles and argued that all functional sub-systems have evolved such complementary roles (Luhmann 1990b, 1995, 1997). Table 1 provides an overview of the state of knowledge in this regard.

Table 1: Service and Audiences Roles (alphabetical order):

Sub-system	Service Role	Audience Role
Arts	Painter, musician, author, curator, conservator	Recipient, e.g. theatre, movie or museum visits, reader, music listener
Economy	Producer, seller, manager	Consumer of products and services
Education	Teacher, University professor, educator	Participant in further education, pupil, student
Health Care	Medical doctor, nurse, mid-wife	Patient

Intimate relationships ¹	No strict polarity between partners, parents, children, other kinship relationships, good friends	
Law	Judge, attorney	Plaintiff, defendant, witness, spectators in a courtroom
Mass media	Journalists	Recipient of radio, TV, newspapers, magazines, online media
Military	Professional soldier	Civil population
Politics	Member of parliament, administrative officer	Constituent, administrative client
Religion	Clergyman, nun	Believer, parishioner
Science	Scientists	Students
Sport	Professional sportsman, trainer	Spectator at sport competitions and tournaments

Source: Own exposition

The modern society, which is influenced by the Enlightenment, pursues the normative mission of including everybody into the society: Nobody shall be excluded (Marshall 1950; Luhmann 1990a). Through institutionalization of different audience roles that allow everybody to participate according to the specific requirements of the functional systems, society seeks to ensure this way of including everybody.

Inclusion, however, operates differently in each system. The quality of inclusion of a person through the audience role of a pupil, for example, differs substantially from the person's inclusion as a patient. The expectations that a pupil has on a school are qualitatively different from the expectations that a patient has on a hospital.

Another important aspect of the functionally differentiated modern society is that no person can identify entirely with one single service or audience role. The roles are too specific, too compartmentalized, to acknowledge the complexity of a person entirely. A person can thus pursue a specific career within each audience or service role (consider the different careers of students at the University, for example) but is unlikely to be included in society only through one of these roles within a specific functional system. Instead, people participate in society in a multiplicity of specific service and audience roles simultaneously, depending on their profession, their health, their needs, their faith, or even the time of the day (Goffman 1967). To be a person therefore never means to participate in society as a person *in toto* but only through several service and audience roles in different functional systems.

Lastly but importantly, Luhmann argued that audience roles from one functional system are not substitutable by roles of another system. As these roles are inextricably linked to their sub-systems, a person is unlikely to succeed in a patient role, for example, when trying to sue a neighbour or vote for a government. Similarly, a person will likely get in trouble when trying

¹ The sphere of intimate relationships, which includes families, is the only sub-system where a clear distinction between service and audience roles fails.

to enter an emergency room in a consumer mindset. It is this particular audience role of the consumer that we look at next.

4 The Consumer as an Audience Role

From the perspective of Luhmann's theory, the consumer role is undoubtedly part of the economic system and complements the role of the producer: They represent the service role providing the consumers as the receivers of their services: Output on the one side, input on the other, is the simple reading (Boulding 1945).

Despite a certain lack of depth when mapping output/input all too directly onto the producer/consumer role pair, it nevertheless seems to hit the mark. The consumer role is specified by expectations of receiving something, not only when buying and using products, but also when using services.² Based on a theoretical distinction from social psychology (Luhmann 1978), it can be argued that producers *act* purposefully and actively to produce and distribute goods and services to consumers. The focal point of producers' actions is therefore an "other-reference" (*Fremdreferenz* in the original). Consumers, in turn, *experience* purposefully and actively by receiving goods and services. Their focal point of attention is experiencing the consumption process and themselves during this process as "*self-experience*" (*Selbstreferenz*) in Luhmannian terminology (see also Schulze 1997; 2013). Even if consumers must typically *act* (produce) by shopping groceries, for example, the purpose of their actions remains on self-experience. Consumers sometimes even switch temporarily to the production mode when, for instance, organizing family parties, pursuing leisure activities, or planning their vacation. Nevertheless, given that they purposefully act as consumers, they are ultimately interested in planning, pursuing or organizing their own actual or future self-experiences. The ultimate goal of producers, in contrast, is to act for others, even if they must sometimes experience (consume) by including goods and services from other producers into their own activities (Marx 1851).

Consumer researchers explored the phenomenon of consumer experiences since Scitovsky (1981), Hirschman/Holbrook (1982), Holbrook/Hirschman (1982) and Campbell (1987). But already Lawrence Abbott (1955: 39) had argued three decades earlier that what „people really desire are not products but satisfying experiences.“ Today, the concept of experiential, hedonic consumption and its differences vis-à-vis material, utilitarian consumption are core notions in consumer research (Pine and Gilmore 1999; Carú and Cova 2003, 2007; Lanier and Rader 2015).

Self-experience alone, however, does not distinguish the consumer as an audience role from other roles sufficiently because experiences matter in other audience roles as well. What is unique to the consumer role is the expectation that consumption should be enjoyable and fun, evoke positive feelings and self-images, and ideally induce happiness (Scitovsky 1976). With Bell (1976) or Campbell (1987) one could consider contemporary consumption as predominantly hedonic. No other audience role can legitimately be held to be primarily interested in evoking pleasure and happiness in the same manner. Or can one expect much happiness from being hospitalized or being at school, for example? Other audience roles may induce pleasure

² In the case of shopping the purchase decision seems foregrounded, not the self-experience, see Holbrook et al's (1986). However, even the decision-making, the ability and necessity to choose related to purchases can be observed from the perspective of self-experience: Consumers choose to observe themselves during and afterwards with regards to how they feel about their decisions. Lastly, everything that consumers aim at could have valued according to their experiential self-consumption, see Miles 1998; Ewen 1999.

and happiness as appreciated side-effects, but neither pupils, nor voters, civilians, or parishioners expect such outcomes from their participation in their functional sub-systems which are concerned with education, politics, military, or religion, respectively.

From our Luhmannian social systems perspective, happiness, fun, pleasure, and satisfaction can be exclusively linked to the consumer role (Lebergott 1993). We may therefore raise reasonable objections against the thesis that modern consumption has already gained universality status.

5 Will a Universalizing of Consumption Lead to a Colonialization and De-differentiation of Modern Society?

With our Luhmannian concept of the consumer audience role in mind, we may now return to explore our initial question: Is consumption everything, and can everything be seen as consumption? Translated into Luhmannian terminology, existing consumer research tends to suggest that the consumer role has already widely contaminated and colonialized all functional sub-systems of modern society beyond economy and thus gained hegemonic status.³ Hence, it no longer matters if people participate in arts, education, health care, mass media, military, politics, law, religion, sports or science: They all expect to consume and evaluate those services like any other commodity to make them happy.

Now, to challenge this claim, imagine this scenario for the patient role: Someone gets sick and sees a doctor to receive the right treatment. In the most serious of cases, the success of this encounter decides on the person's life or death. What would happen if the patient role became increasingly governed, or entirely "infected", by consumer expectations? Would the patient expect to be entertained, that the receiving of medical treatment would make her happy, or at least evoke positive feelings and bolster a positive self-image? Such outcomes seem possible in periods of recovery, or possibly when examining the results of beauty surgery or injecting Botox. During the treatment in a hospital, however, it seems more likely that other, more suitable goals are prevalent and the focal expectation of the patient remains to recover and be healed. Given these considerations, the universality thesis would first have to be empirically scrutinized in each system before being able to convince.

Nevertheless, is it possible that such a colonialization has already begun and is likely to proceed further? This would raise some important questions: How would the functional systems respond to such a consumer colonialization? Which implications would it have for the complementary service roles and the people enacting them as artists, doctors, judges, politicians, priests, teachers, scientists, soldiers, and sportsmen? Would these service providers begin to consider themselves as producers entirely, with other-reference top of mind, rather than maintain their focus on their internal imagination, faith, performance, or vision? Which misunderstandings, intra-role conflicts, inefficiencies, and other dysfunctions would result from such changes for each system? How, for example, would university professors withstand their (paying) consumer students' requests to be entertained and feel good about themselves even when confronted with complex subject matters or when showing weak classroom performance?

And lastly, what would happen to the functionally differentiated society if the differentiation of service and audience roles would erode? Would this entail an evolutionary de-differentiation of society as we know it, and a society emerge that is governed entirely by producer and con-

³ This has been already criticized from the inside of the consumer research field, see MacInnis/Folkes 2010.

sumer roles of the economic system? Would such a de-differentiated society develop new systems of checks and balances that replace existing structures? Is such a scenario thinkable in the theoretical confines of the existing theory of society?

This chapter is not attuned to answer these important questions, but to question a particular answer, that is, the “universality of consumption” thesis. We have argued with reference to Niklas Luhmann’s theory of society that a colonialization of society by the consumer role is currently more a thesis than an empirical fact, which, if eventually come true, would have severe consequences for the social organization of our society. To empirically assess and critically reflect these changes and their implications seems to be a worthwhile task for (Luhmannian) social systems research, but for consumer researchers who follow their research subjects into social realms in which they were previously not to be found.

References

- Abbott, Lawrence (1955). *Quality and Competition. An Essay in Economic Theory*. New York: Columbia University Press.
- Akerlof, David (1970). The Market for Lemons: Quality Uncertainty and the Market Mechanism. In *Quarterly Journal of Economics*, Vol. 84, No. 3, pp. 488–500.
- Alexander, Jeffrey/Colomy, Paul (eds.) (1990). *Differentiation Theory and Social Change. Comparative and Historical Perspectives*. New York: Columbia University Press.
- Bailey, Kenneth D. (2006). Systems Theory. *Handbook of Sociological Theory*. Turner, Jonathan H. New York: Springer. Pp. 379-401.
- Baudrillard, Jean (1998 [1970]). *The Consumer Society*. London: Sage.
- Bauman, Zygmunt (1998). *Work, consumerism and the new poor*. Buckingham/Philadelphia: Open University Press.
- Bauman, Zygmunt (2007). *Consuming Life*. Cambridge/Malden: Polity.
- Bell, Daniel (1976). *The Cultural Contradictions of Capitalism*. New York: Basic Books.
- Boulding, Kenneth E. (1945): The Consumption Concept in Economic Theory. In *American Economic Review*, Vol. 35, No. 2, pp. 1-14.
- Campbell, Colin (1987). *The Romantic Ethic and the Spirit of Modern Consumerism*. London/New York: Basil Blackwell.
- Carù, Antonella/Cova, Bernard (2003). Revisiting consumption experience. A more humble but complete view of the concept. In *Marketing Theory*, Vol. 3, No. 2, pp. 267-286.
- Carù, Antonella/Cova, Bernard (eds.) (2007). *Consuming Experience*. London/New York: Routledge.
- du Gay, Paul (1996). *Consumption and Identity at Work*. London/Thousand Oaks/New Delhi: Sage.
- Ewen, Stuart (1999). *All Consuming Images. The Politics of Style in Contemporary Culture*. Revised Edition. New York: Basic Books.
- Featherstone, Mike (1983). Consumer Culture: an Introduction. In *Theory, Culture & Society*, Vol. 1, No. 3, pp. 4-9.
- Featherstone, Mike (1991). *Consumer Culture and Postmodernism*. London/Newbury Park/New Delhi: Sage.
- Giddens, Anthony (1973). *The class structure of the advanced societies*. London: Hutchinson.
- Goffman, Erving (1967). *Interaction Ritual. Essays in Face to Face Behavior*. Chicago: Aldine Pub. Co.
- Hirschman, Elizabeth C./Holbrook, Morris B. (1982) Hedonic Consumption: Emerging Concepts, Methods and Propositions. In *Journal of Marketing*, Vol. 46, pp. 92-101.

- Holbrook, Morris B./Hirschman, Elizabeth C. (1982). The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun. In *Journal of Consumer Research*, Vol. 9, pp. 132-140.
- Holbrook, Morris B./Lehmann, Donald R./O'Shaughnessy, John (1986). Using versus Choosing: The Relationship of the Consumption Experience to Reasons for Purchasing. In *European Journal of Marketing*, Vol. 20, No. 8, pp. 49-62.
- Lanier, Clinton D. Jr./Rader, C. Scott (2015). Consumption experience: An expanded view. In *Marketing Theory*, Vol. 15, No. 4, pp. 487-508.
- Lebergott, Stanley (1993). *Pursuing Happiness. American Consumers in the Twentieth Century*. Princeton: Princeton University Press.
- Lebow, Victor (1955). Price Competition. In *Journal of Retailing*, Vol. 31, No. 1, pp. 5-10.
- Luhmann, Niklas (1978). Erleben und Handeln. In Hans Lenk (ed.). *Handlungstheorien interdisziplinär Bd. 2*. München: Fink, pp. 235-253.
- Luhmann, Niklas (1982). *The Differentiation of Society*, New York: Columbia University Press.
- Luhmann, Niklas (1987). The Evolutionary Differentiation between Society and Interaction. In Jeffrey C. Alexander/Bernhard Giesen/Richard Münch/Neil J. Smelser (eds.). *The Micro-Macro Link*. Berkeley: University of California Press, pp. 112-131.
- Luhmann, Niklas (1990a). *Political Theory in the Welfare State*. Berlin, de Gruyter.
- Luhmann, Niklas (1990b). The Paradox of System Differentiation and the Evolution of Society. In Jeffrey C. Alexander/Paul Colomy (eds.). *Differentiation Theory and Social Change: Comparative and Historical Perspectives*. New York: Columbia University Press, pp. 409-440.
- Luhmann, Niklas (1995). *Social Systems*. Stanford: Stanford University Press.
- Luhmann, Niklas (2012). *Theory of Society. Volume 1*. Stanford. Stanford University Press.
- Luhmann, Niklas (2013) *Theory of Society. Volume 2*. Stanford. Stanford University Press.
- Lury, Celia (1996) *Consumer Culture*. Cambridge: Polity Press.
- MacInnis, Deborah J./Folkes, Valerie S. (2010). The Disciplinary Status of Consumer Behavior: A Sociology of Science Perspective on Key Controversies. In *Journal of Consumer Research*, Vol. 36, No. 6, pp. 899-508.
- Marshall, Thomas S. (1950) *Citizenship and social class and other essays*. Cambridge: Cambridge University Press.
- Marx, Karl (1979). *A Contribution to the Critique of Political Economy*. New York: International Publishers.
- Miles, Steven (1998) *Consumerism – as a Way of Life*. London: Sage.
- Miles, Steven (2015). Consumer Society. In Daniel Thomas Cook/J. Michael Ryan (eds.). *The Wiley Blackwell Encyclopedia of Consumption and Consumer Studies*. Chichester: John Wiley & Sons, pp. 145-154.
- Miller, Daniel (ed.) (1995). *Acknowledging Consumption. A Review of New Studies*. London: Routledge
- Parsons, Talcott (1951). *The Social System*. Glencoe: The Free Press.
- Pine, B. Joseph II./Gilmore, James H. (1999). *The Experience Economy. Work is Theater and Every Business a Stage*. Boston: Harvard Business School Press,
- Ratneshwar, S./Mick, David Glen (Hg.) (2005). *Inside Consumption. Consumer motives, goals, and desires*. London/New York: Routledge.
- Ratneshwar, S./Mick, David Glen/Huffman, Cynthia (eds.) (2000). *The Why of Consumption. Contemporary perspectives on consumer motives, goals, and desires*. London/New York: Routledge.
- Riesman, David/Glazer, Nathan/Denney, Reuel (1950). *The lonely crowd. A study of the changing American character*. New Haven: Yale University Press.

- Schor, Juliet (2006). Consumer Culture. In Jens Beckert/Milan Zafirovski (eds.): International Encyclopedia of Economic Sociology. London/New York: Routledge, pp. 99-101.
- Schulze, Gerhard (1997). From Situations to Subjects: Moral Discourse in Transition. In Pekka Sulkunen/John Holmwood/Hilary Radner (eds.). Constructing the New Consumer Society. New York: St. Martin's Press, pp. 38-57.
- Schulze, Gerhard (2013). The Experience Market. Handbook on the Experience Economy. Sundbo, Jon/ Sorensen, Flemming. Cheltenham, UK, Edward Elgar: 99-121.
- Scitovsky, Tibor (1976). The Joyless Economy. The Psychology of Human Satisfaction. Revised Edition. New York/Oxford: Oxford University Press.
- Scitovsky, Tibor (1981). The Desire for Excitement in Modern Society. In *Kyklos*, Vol. 34, No. 1, pp. 3-13.
- Slater, Don (1997). Consumer Culture and Modernity. Cambridge/Oxford/Malden: Polity.
- Vincent, Laurence (2002). *Legendary Brands. Unleashing the Power of Storytelling to Create a Winning Marketing Strategy*. Chicago.
- Zukin, Sharon/Maguire, Jennifer Smith (2004). Consumers and Consumption. In *Annual Review of Sociology*, Vol. 30, pp. 173-197.