Can Consumers Behave Chaotically?
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The detection of chaotic consumer behaviour would have far reaching implications for consumer researchers in terms of how the consumer is conceptualized, modelled and analyzed. In this paper deterministic chaos is briefly described prior to a discussion of how chaotic time series behave in phase space. The paper uses individual product choice time series as the case for discussion. True chaos will display certain types of recognizable geometric patterns in phase space and will not visit any one phase space co-ordinate more than once. This paper argues that the process required to generate such series is highly unlikely in conceptual terms in this context. It therefore suggests that chaotic models and efforts to detect chaos face intractable conceptual problems in the area of product choice and consumer behaviour in general.

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EXTENDED ABSTRACT
The detection of chaotic consumer behaviour would have far reaching implications for consumer researchers in terms of how the consumer is conceptualized, modelled and analyzed (see Hibbert and Wilkinson 1994; Smith 2002; Holbrook 2003). In this paper deterministic chaos is briefly described prior to a discussion of how chaotic time series behave in phase space. Phase space is an abstract mathematical space in which co-ordinates (based on explanatory variables or lagged values of the dependent variable) describe the phase (or state) of a dynamical system at any one time. True chaos will display certain types of recognizable migrating geometric patterns in phase space and will not visit any one phase space co-ordinate more than once. In this sense the paper takes a purist stance (see Williams 1997) on its definition of chaos rather than equating chaos with a general state of complexity (see De Greene 1996). So this paper does not accept the proposition that chaos exists in any situation with verifiable causes and complex output. The paper uses individual product choice time series as the case for discussion regarding the applicability of deterministic chaos in consumer research. The reason for this is the importance of product choice as a building block of the market and its position as the most obvious ‘output’ to the processes of consumer behaviour.

Much of the previous research into choice patterns has described many micro level time series as complex or even random (e.g. Bass, Jeuland & Wright 1976; Goodhardt et al. 1984; Ehrenberg 1988). These inferences allow for the potential of chaos, which is often first described as randomness i.e. chaos can ‘masquerade’ as randomness. Chaos can appear stochastic in a simple time series or sequence plot but there must be an underlying or ‘hidden’ form to that plot. Any form is evident when the data is plotted in phase space.

This paper argues that the process required to generate chaotic series is highly unlikely in conceptual terms in this context. Chaos requires a system where output is entirely endogenously determined. It therefore requires the consumer to be a calculative variety seeker impervious to situational factors and other exogenous determinants e.g. advertising in order to behave in a manner that is truly chaotic. True variety seeking as opposed to derived variety seeking would be the only behaviour that could lead to the avoidance of any repetition of phase space coordinates (e.g. product a could never be consumed after product b more than once). It also requires the series to be non-stationary since chaotic form in phase space is migratory. We know from previous research that most micro-level processes are stationary in the long term. The paper therefore suggests that chaotic models and efforts to detect chaos face intractable conceptual problems in the area of product choice and consumer behaviour in general since ‘exogenous’ influences are always present (and often very powerful). This mirrors the difficulties apparent in applying chaos to other social and behavioural sciences and its failure thus far to enact the impact that was initially predicted when the concepts first emerged form the natural sciences (enclosed systems with limited exogenous influences are more common in the natural sciences). Subjects like people and markets are often assailed by exogenous factors and are therefore far more likely to be stochastic rather than deterministic process such as chaos.

REFERENCES
ROUND TABLE
Consumer Experience from a Consumer Perspective
Solveig R. Wikström, Stockholm University, Sweden

SUMMARY
Although “experience” is a widely used concept in recent consumer marketing, and even in discussions of industry structure (experience industry) and economic development (the new experience economy) there is sparsely of research on the consumer perspective of the concept. The discussion, with the aim to stimulate more research on this topic, focused mainly on two issues. First, on aspects relevant for an understanding of the concept? How can the concept be defined? Second, how to pursue research on consumer experience? What approaches are suitable?

Participating discussants were: Alladi Venkatesh, University of California at Irvine, Fuat Firat, USD, Odense, Denmark, Jacob Östberg, Stockholm University School of Business, and Niklas Gustafsson, SCT and Stockholm University School of business, reporter. The attendants at the discussion filled the room. Excerpts

Gustafsson, SCT and Stockholm University School of business, Ö of California at Irvine, Fuat Firat, USD, Odense, Denmark, Jacob

experience? What approaches are suitable?

From the lively discussion:

Concepts and understanding
• Fuat Firat: All consumption is seen through the “lens” of experience.

• A gentleman from Brazil : every act of consumption is an experience…..

Dannie Kjeldgaard from University of Southern Denmark: the discussions around the concept of “experience” must be discussed on two different levels: (1) How consumers discursively understand what an experience is and (2) how do you actually experience something? The challenge is how we as researchers in this field can go into the latter.

• Gunter Silberer: Experience is a cognitive affective process… in the 70:s there were only attributive research…. A key question is if you define experience as a process or a result.…..

• Niklas Gustafsson: ….. experience is a cognitive process that is connected to memory!!….. but intention is not required for the creation of memorable experiences….

• Susanne H.G. Poullsson, Bond University, Queensland, Australia: It is important for the discussion around experience to get the terminology right. If we star to use the term experience when handling a vacuum cleaner it gets misleading. One way is to divide it into pure experience (e.g.amusement park visits) vs. experiential aspects of goods and services.

• Päivi Timonen, National Consumer Research Center, Finland: We tried to work with experience but changed the focus to the term “Fun” instead…..Personal interest is very important…

• Bernard Cova, ESCP-EAP, France: regarding the question of how to help consumers to emerge him/her self into the experience—we borrow the psychological concept of “Appropriation”

• Eva Heiskanen, Consumer Research Centre, Finland: When talking about consumer experience the literature talks about people’s possibilities to learn how to experience……

• Fuat Firat: ….. one of the limitations in Pine & Gilmore’s work is the view that people are only looking for positive experience.

• Someone in the forum: people also want to have experiences that are not fun…they seek them out. Take the tsunami in Thailand for example where people are going down voluntarily

• Kara Chang, Hong Kong Baptist University: In Hong Kong—sending children to mainland china to experience a different environment and family situation, and ……Similar to the assigned meaning discussion…

How can we pursue research/measure experience
Fuat Firat suggests that it would be good to start with classifying experience. What is experience?

Gunter Silberer, Georg-August-Universität, Göttingen: We try to measure experience in a way that is different from the ordinary attitude measurement used in marketing. We try to find out what a consumer feel and think……

Susanne Poulsson: An interesting question is if experience actually can be measured and in that case what are we going to measure and when?

Solveig: Are there any possible approaches to measure the experience?

Gunter Silberer: We present a paper tomorrow… we try to measure experience via aided recall ….. getting people to talk about their experiences…

Measuring reality as they go along…

The peak measurement measuring only things that are very high in the emotional scale…..

Alladi: measure on scales of dichotomies, for example

Positive–Negative
Memorable–Not memorable
High meaning–Low meaning
High substance–Low substance

Kara Chang: measuring via consumers’ meaning and engagement…..

People conducting research in this area are aa:
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