

Abstract of a paper to be presented at the  
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## Product Design (and Characteristics Advertising)

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We consider the product design problem for a firm, with a view to characterization of the equilibrium choice and comparison with the optimum. For a monopoly choosing a single variant specification to sell, the equilibrium choice is the socially optimal specification for a common class of variant demand functions. For a duopoly, we stress a hedonic approach to attribute choice. “Constructive” characteristics tend to be chosen by both firms, neutralizing their impact on profit, and benefitting consumers. “Divisive” characteristics are chosen by only one firm, and typically raise profits of both firms, to consumers' detriment. We then allow for firms to choose product lines. We first characterize the pricing of a monopolist for a given product line as the upper envelope of marginal revenue curves to the individual variant demand functions. The equilibrium product designs to include in a product line are those yielding the highest upper envelope. In a central case (corresponding to a generalized vertical differentiation framework), the equilibrium product range is exactly the same as the socially optimal range. Finally (time permitting) the talk will look at a “sheening” view of advertising whereby firms choose which of the characteristics embodied in their product to enhance and stress in persuasive advertising. The model suggests some tendency for specialization in promotion, and stresses free-rider and zero-sum advertising outcomes. Some loose evidence for OTC Analgesics is discussed.