

*6th Rose Marie Pangborn Symposium
Harrogate, UK
August 7-11, 2005*

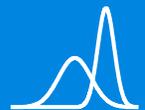


A New Tool to Optimize Product Characteristics and Study Population Segmentation

B. Rousseau*¹, J-M. Dessirier², R. Velthuisen² and D.M. Ennis¹

¹The Institute for Perception, USA

²Unilever Research & Development, USA



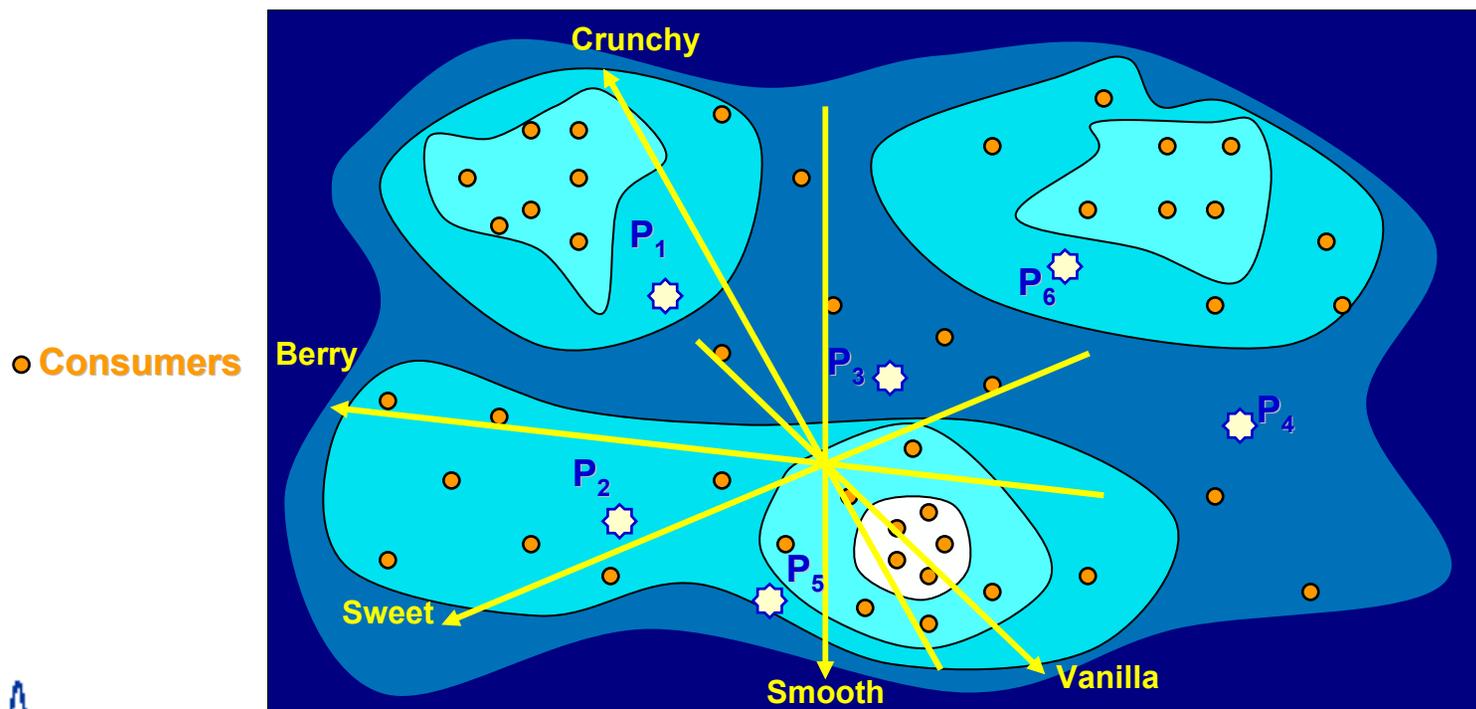


Study Background

- Objectives of consumer investigations
 - Understand consumer expectations
 - Identify potential population segmentation
 - Discover the drivers of consumer perceptions (liking, freshness, moisturization, etc.)
 - Establish products' properties that will optimize consumer perceptions
- Recently developed methodology:
 - Landscape Segmentation Analysis® (LSA)***
- Usually applied to hedonic investigations
- This study: Expected **Moisturizing** and **Refreshing** properties of soap bar images

Landscape Segmentation Analysis

- ❖ LSA first “unfolds” liking and creates a space relevant to consumer acceptability
- ❖ Descriptive data are then added by regressing the attributes on the map
 - ❖ Some attributes can be fit on the map and are drivers of liking
 - ❖ Others can't and are not relevant for consumer acceptability

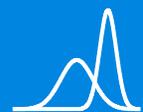
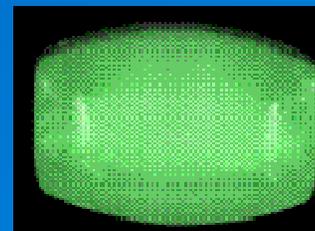
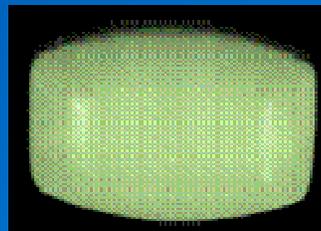


6th Rose Marie Pangborn Symposium
Harrogate, UK
August 7-11, 2005



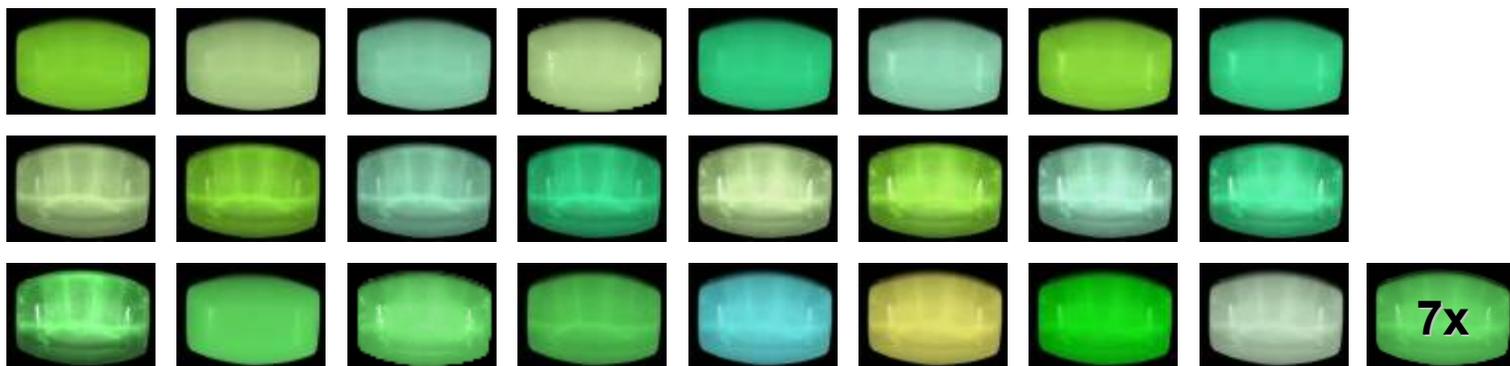
**A New Tool to Optimize Product Characteristics
and Study Population Segmentation**

**Expected Moisturizing and Refreshing
Properties of Soap Bar Images**



Study Design

- Pictures of bar soaps rated on *moisturizing* and *refreshing* expectation
- 25 different pictures, central composite design on 4 variables (Translucency, Shine, Hue and Saturation), 5 levels per variable
- Total of 31 pictures (middle point evaluated 7 times)





Study Design *(continued)*

- Study conducted in the Tokyo area in Japan
- 610 female consumers, split in two groups
 - Group 1: *Moisturizing* (310 consumers)
 - Group 2: *Refreshing* (300 consumers)
- Expected Moisturizing and Refreshing properties rated on a 15-point scale



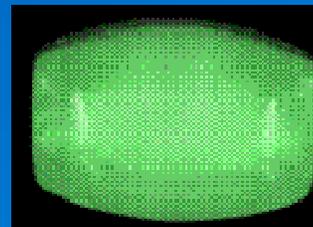
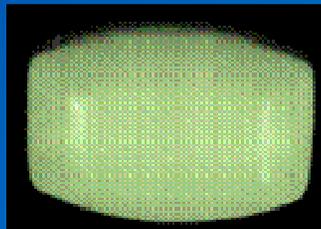
- Sessions lasted about 30 minutes

6th Rose Marie Pangborn Symposium
Harrogate, UK
August 7-11, 2005



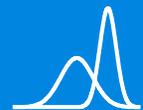
**A New Tool to Optimize Product Characteristics
and Study Population Segmentation**

Expected Moisturizing and Refreshing Properties of Soap Bar Images



RESULTS

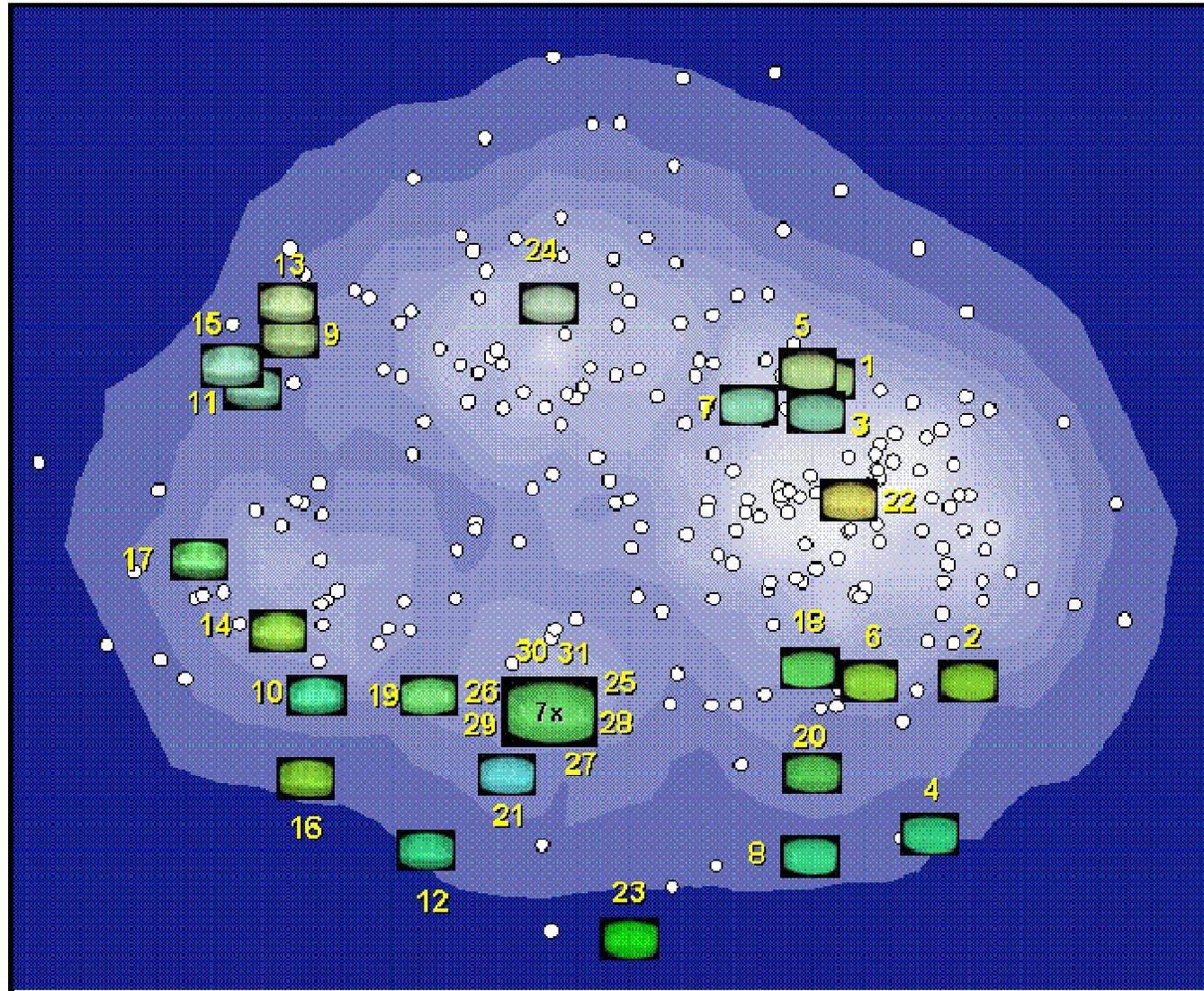
www.ifpress.com



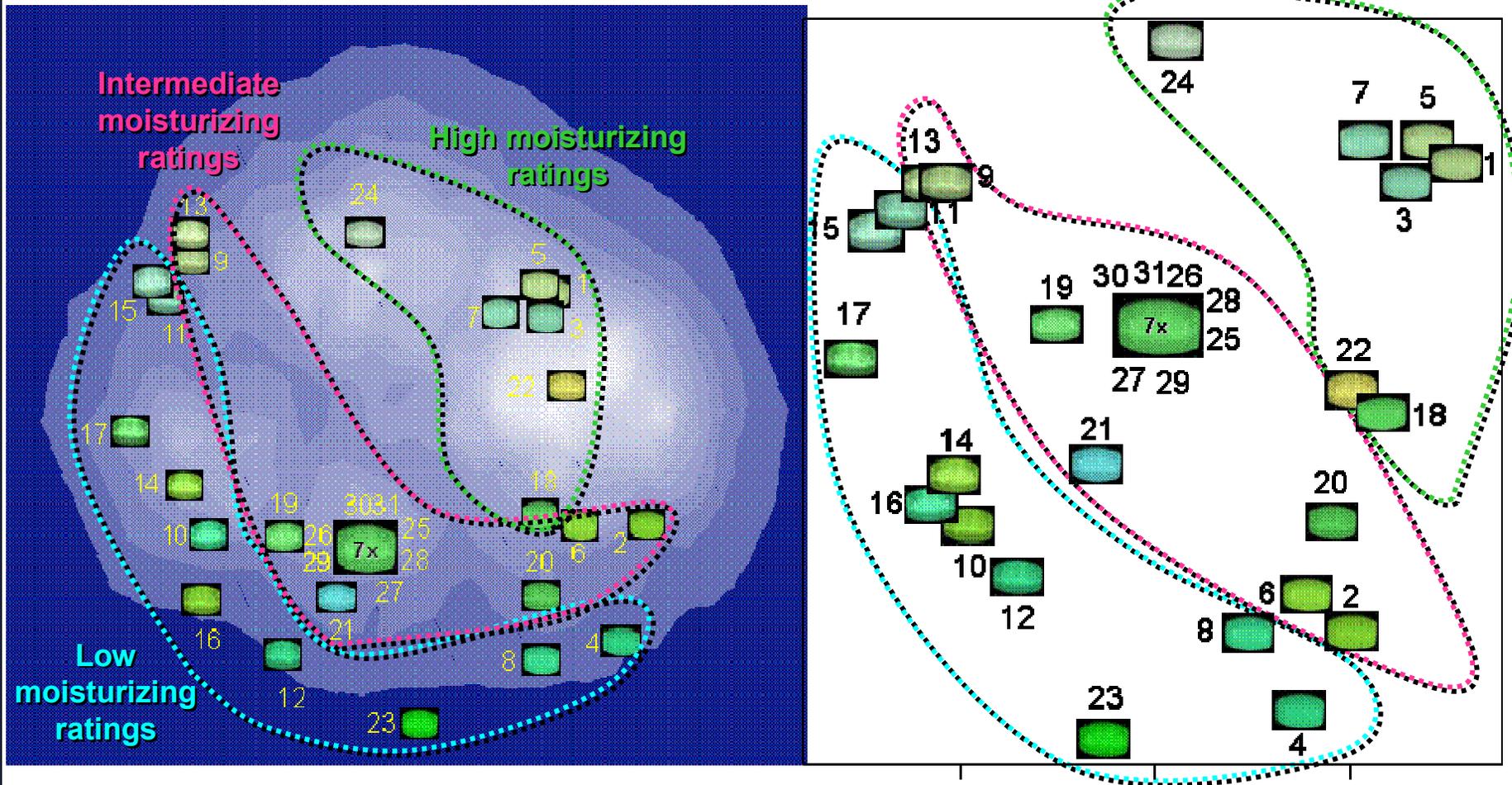
Moisturizing LSA

- Soap image
- Consumer

Individual points show the location of the “ideal” moisturizing soap image for each consumer



Moisturizing LSA vs. PCA



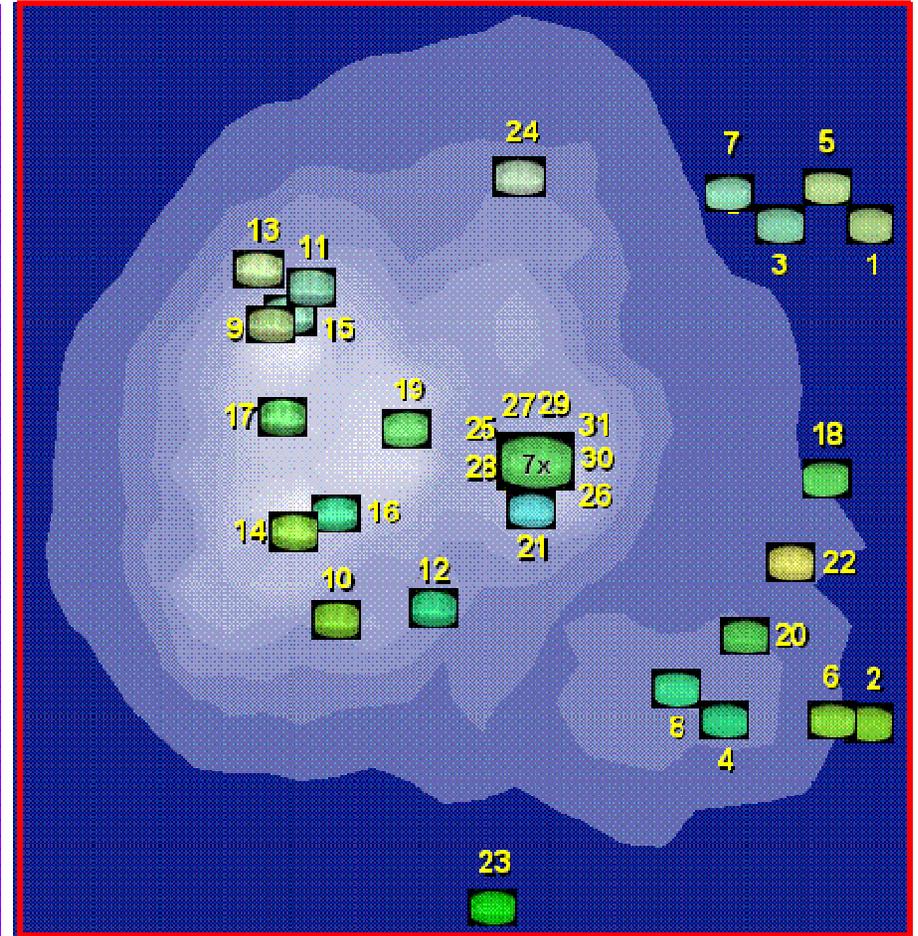
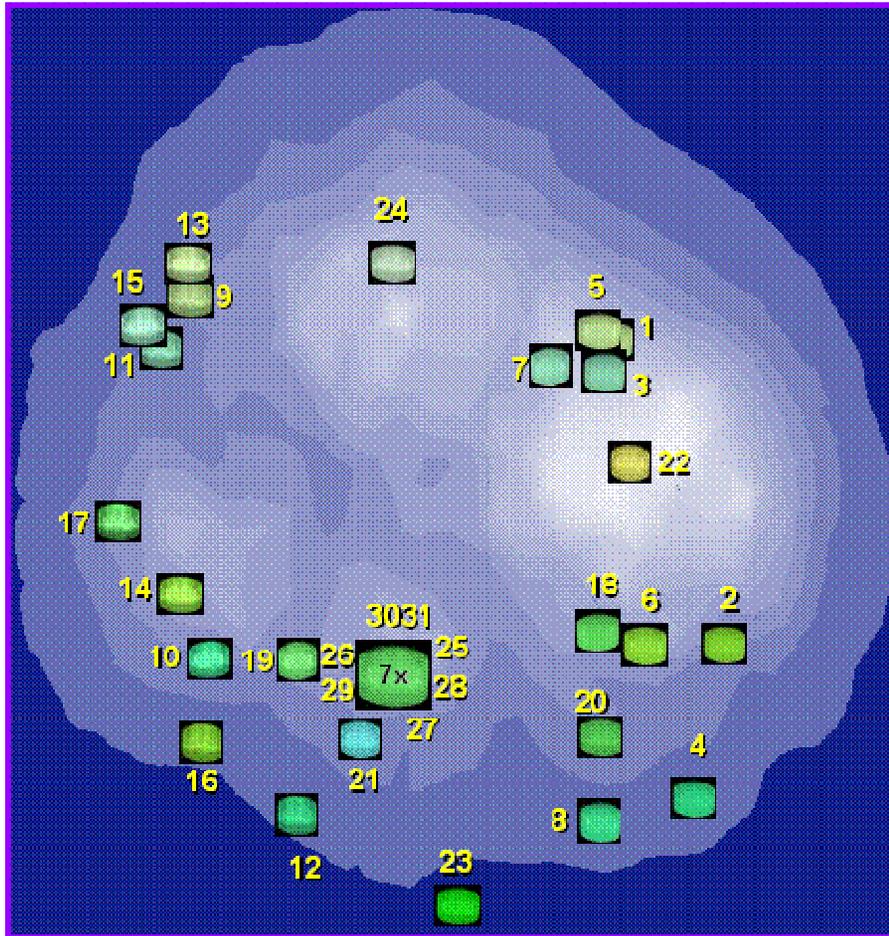
❖ Similarity due to the linearity of perceived moisturizing properties



Moisturizing vs. Refreshing LSA's

Moisturizing LSA

Refreshing LSA



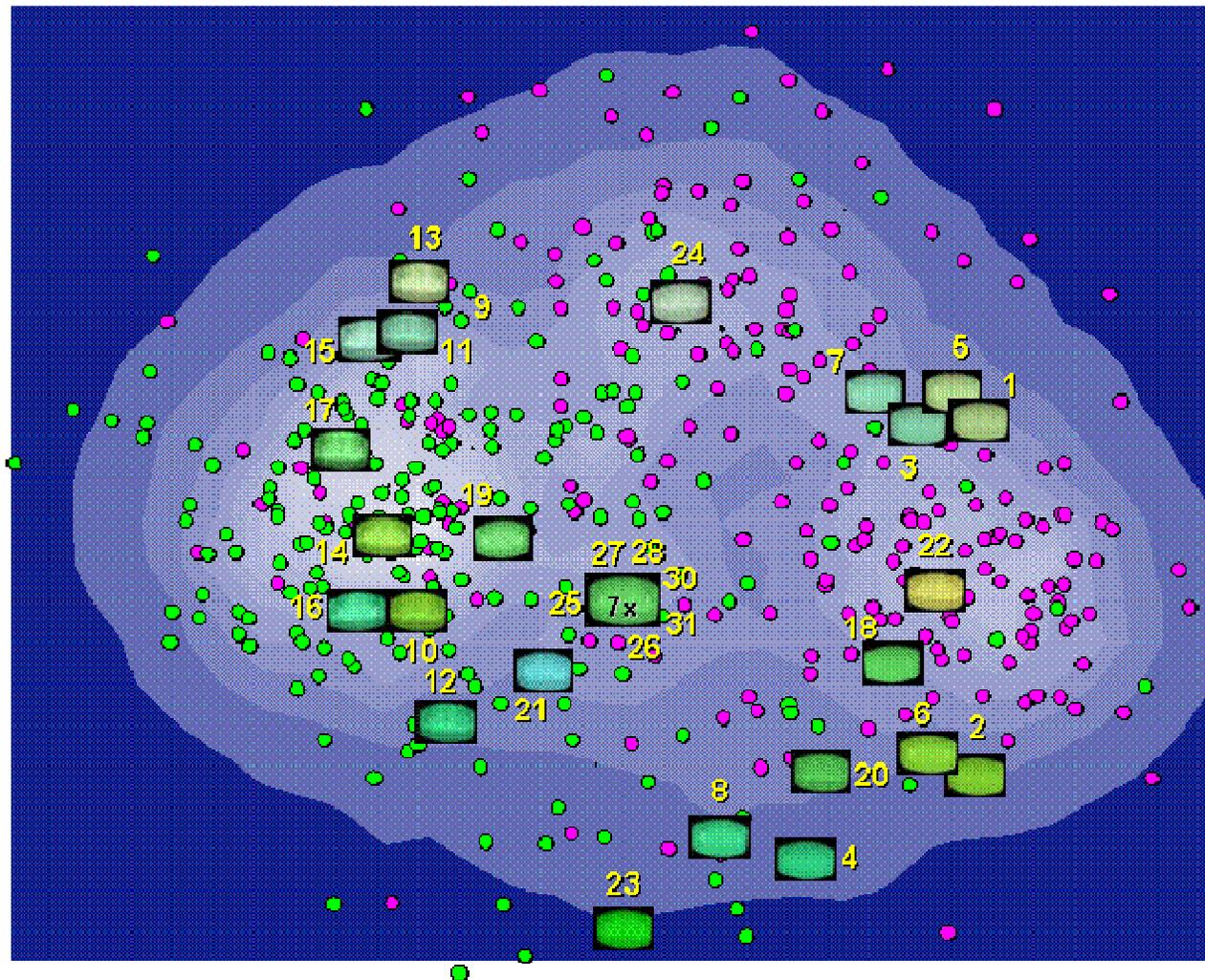
- ❖ Relative product locations are almost identical
- ❖ But consumer locations are not



Combined Moisturizing & Refreshing LSA

● Refreshing consumers

● Moisturizing consumers

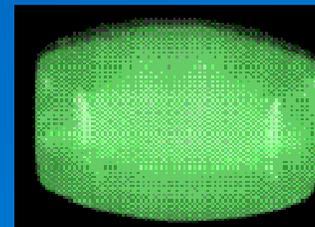
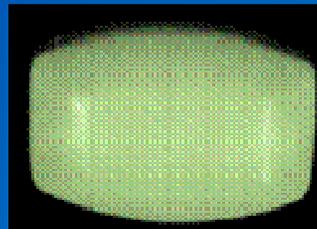


6th Rose Marie Pangborn Symposium
Harrogate, UK
August 7-11, 2005

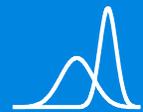


**A New Tool to Optimize Product Characteristics
and Study Population Segmentation**

RESULTS

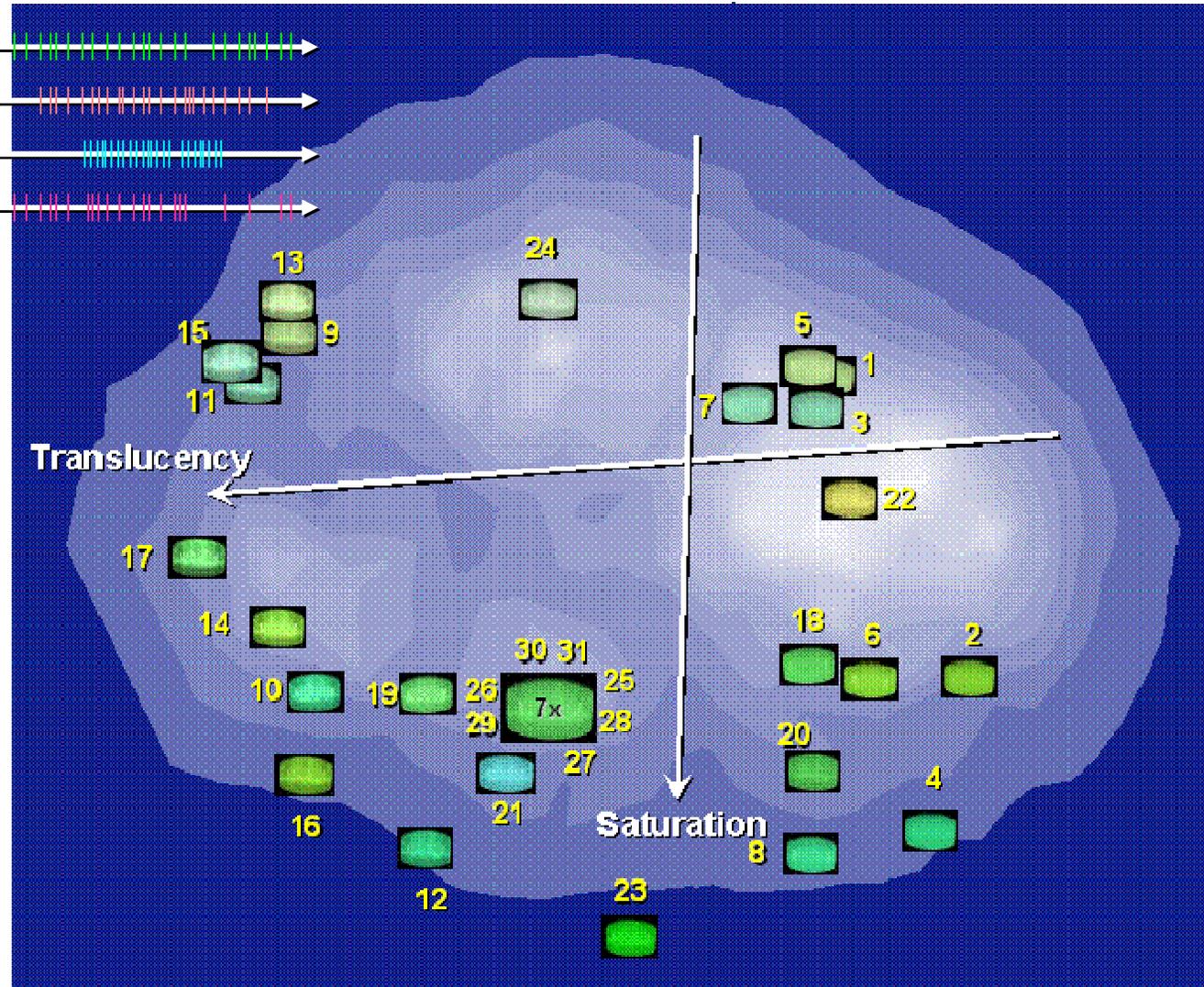


Drivers of Perception



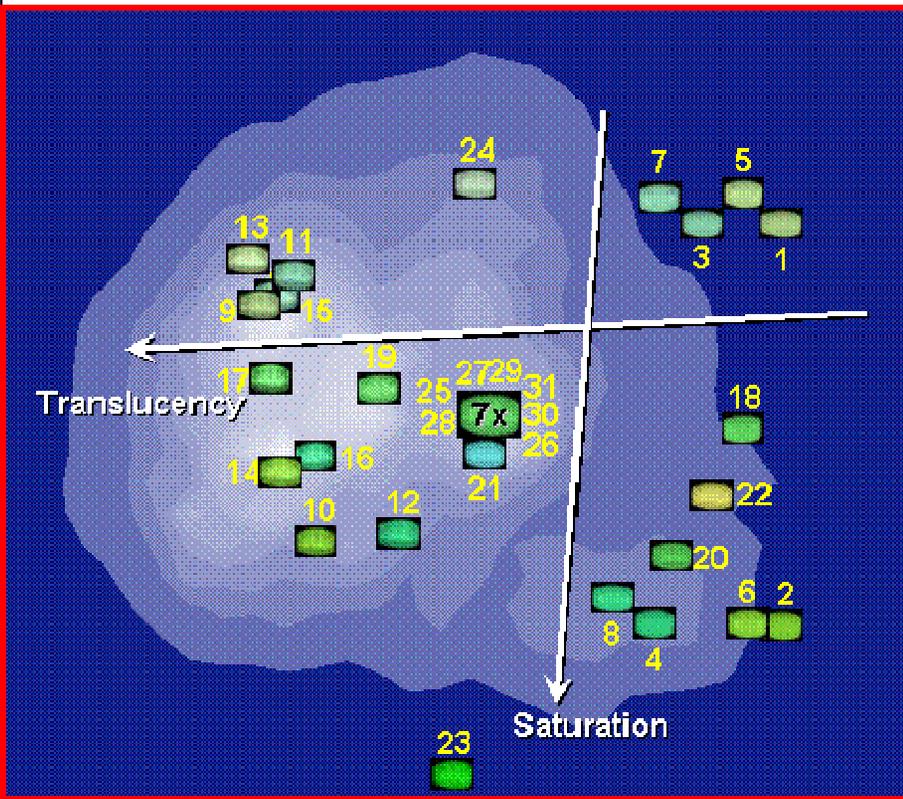
Moisturizing Perception: Drivers

- Translucency
- Shine
- Hue
- Saturation

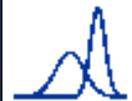
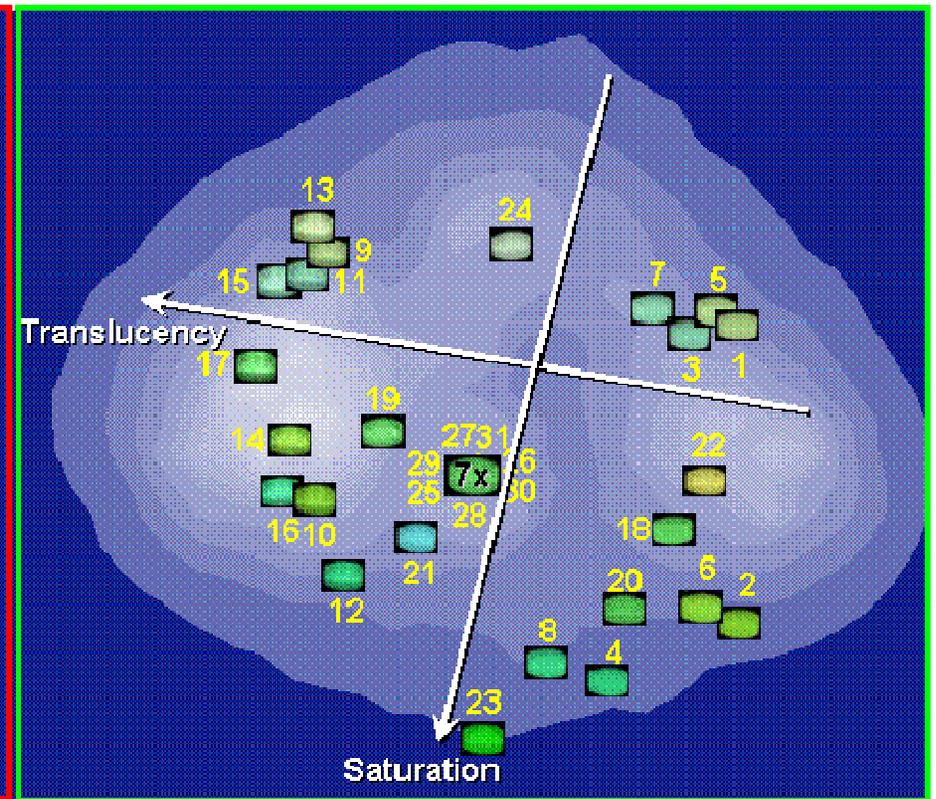


Refreshing and Combined LSAs: Drivers

Refreshing LSA



Combined LSA

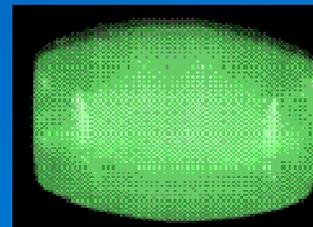
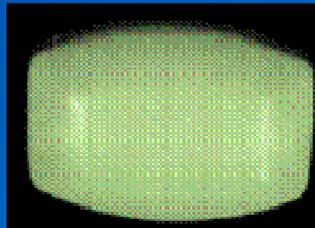


6th Rose Marie Pangborn Symposium
Harrogate, UK
August 7-11, 2005

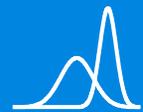


**A New Tool to Optimize Product Characteristics
and Study Population Segmentation**

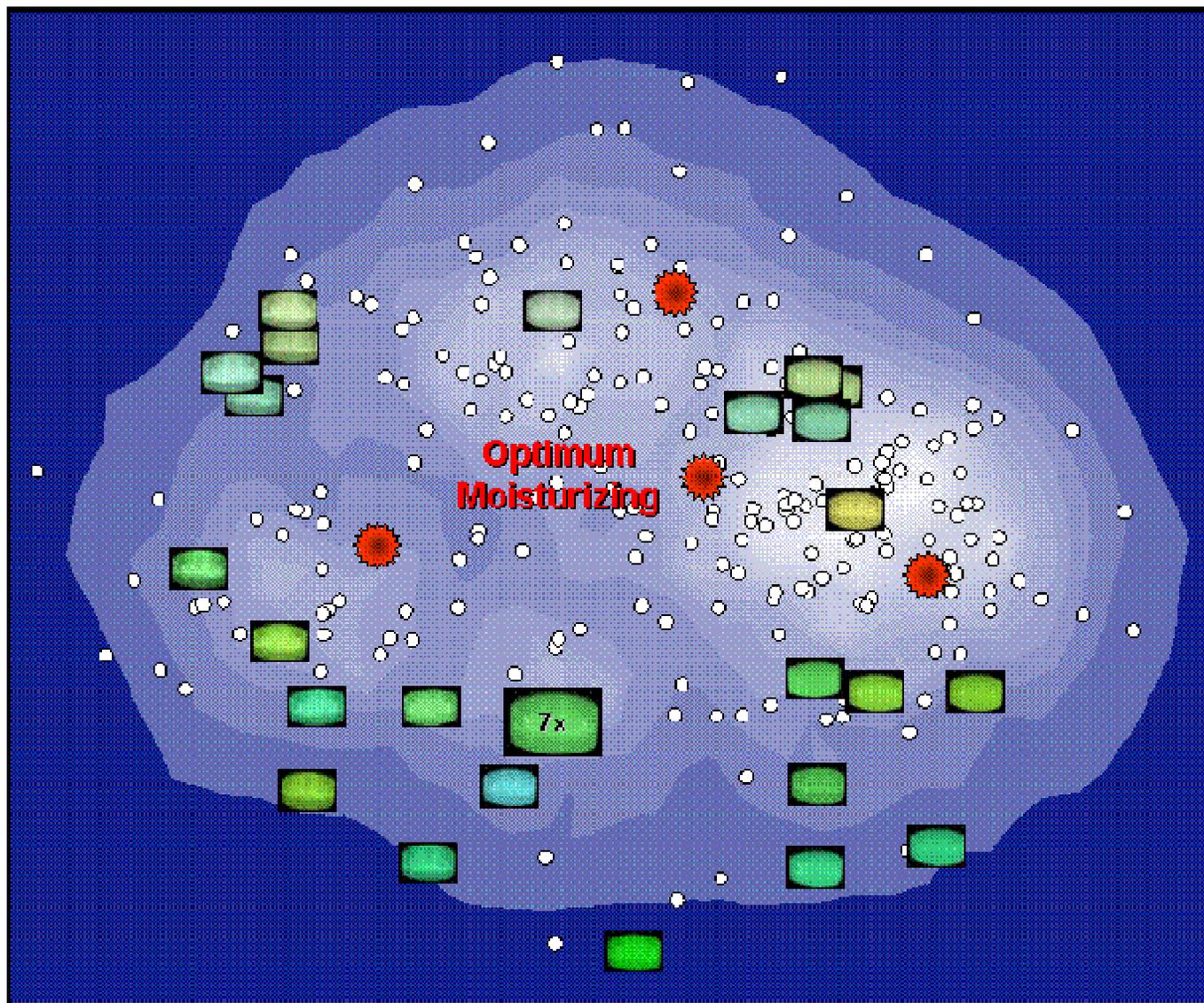
RESULTS



Optimum Products



Moisturizing Perception: Optimum

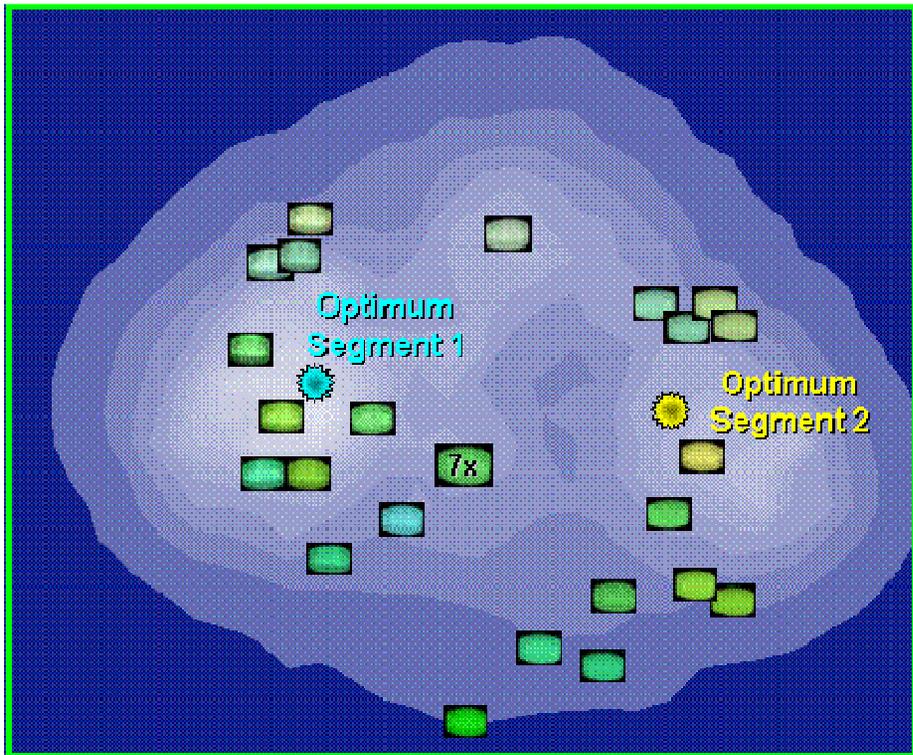
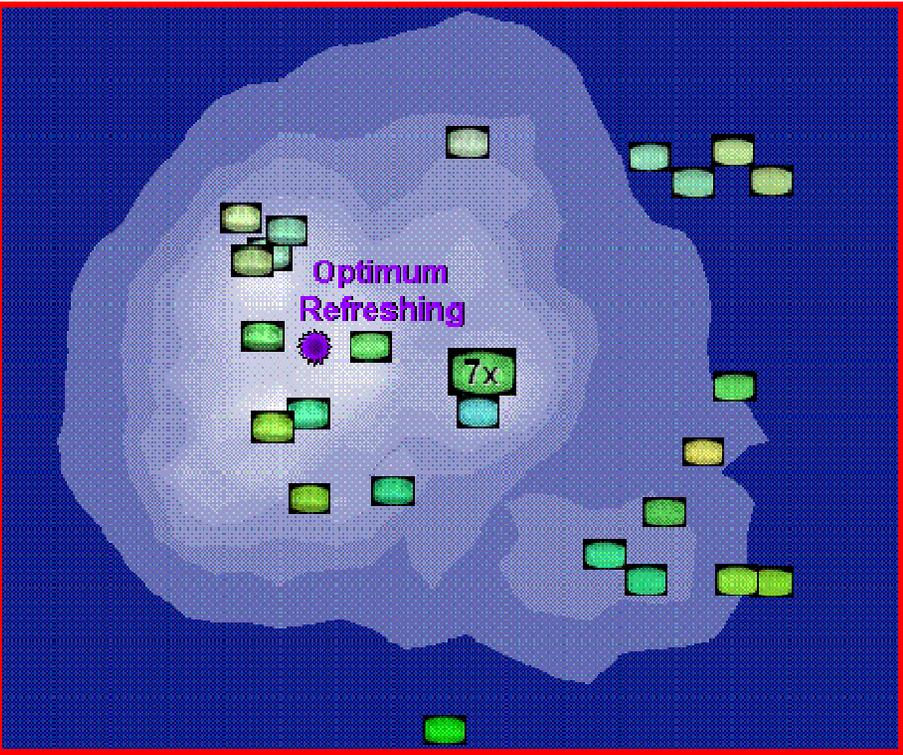




Optimum (continued)

Refreshing LSA

Combined LSA

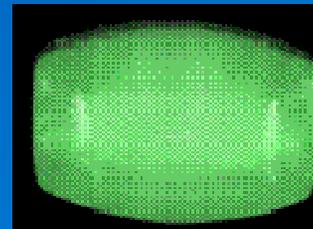
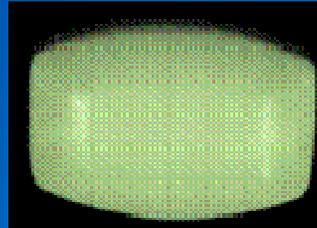


6th Rose Marie Pangborn Symposium
Harrogate, UK
August 7-11, 2005



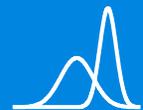
**A New Tool to Optimize Product Characteristics
and Study Population Segmentation**

RESULTS

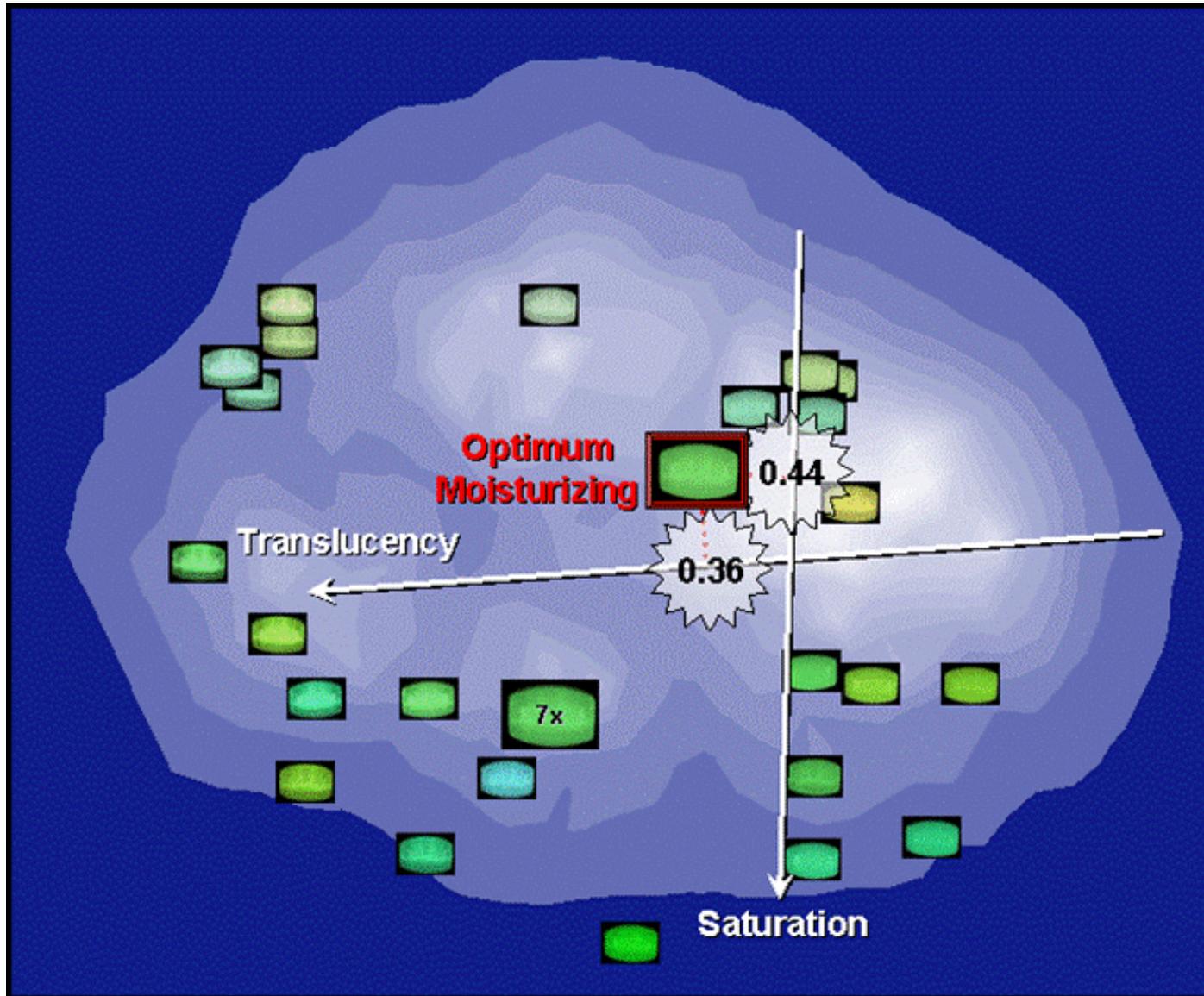


**Creating the Optimum
Products**

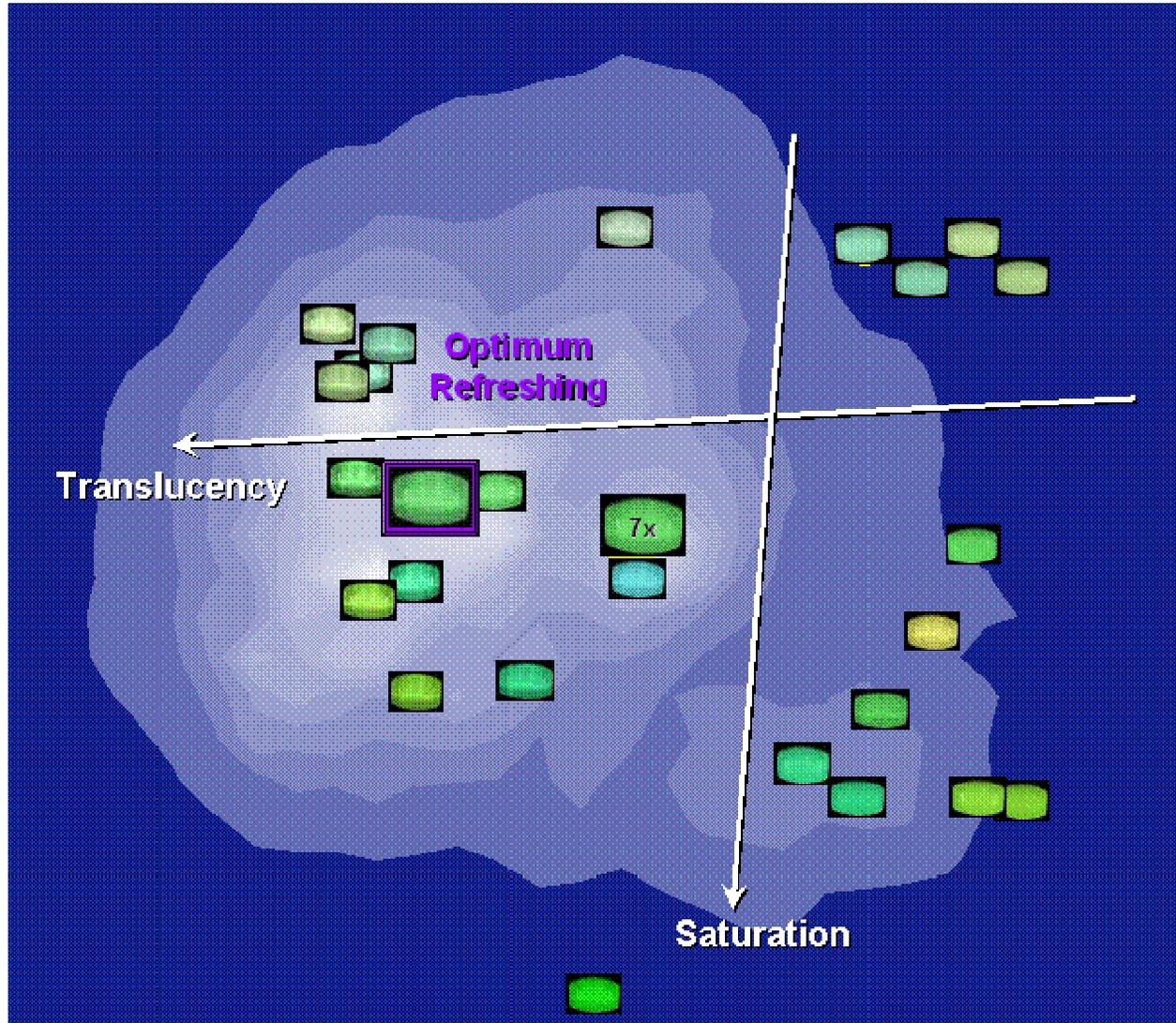
www.ifpress.com



Moisturizing Perception: Optimum

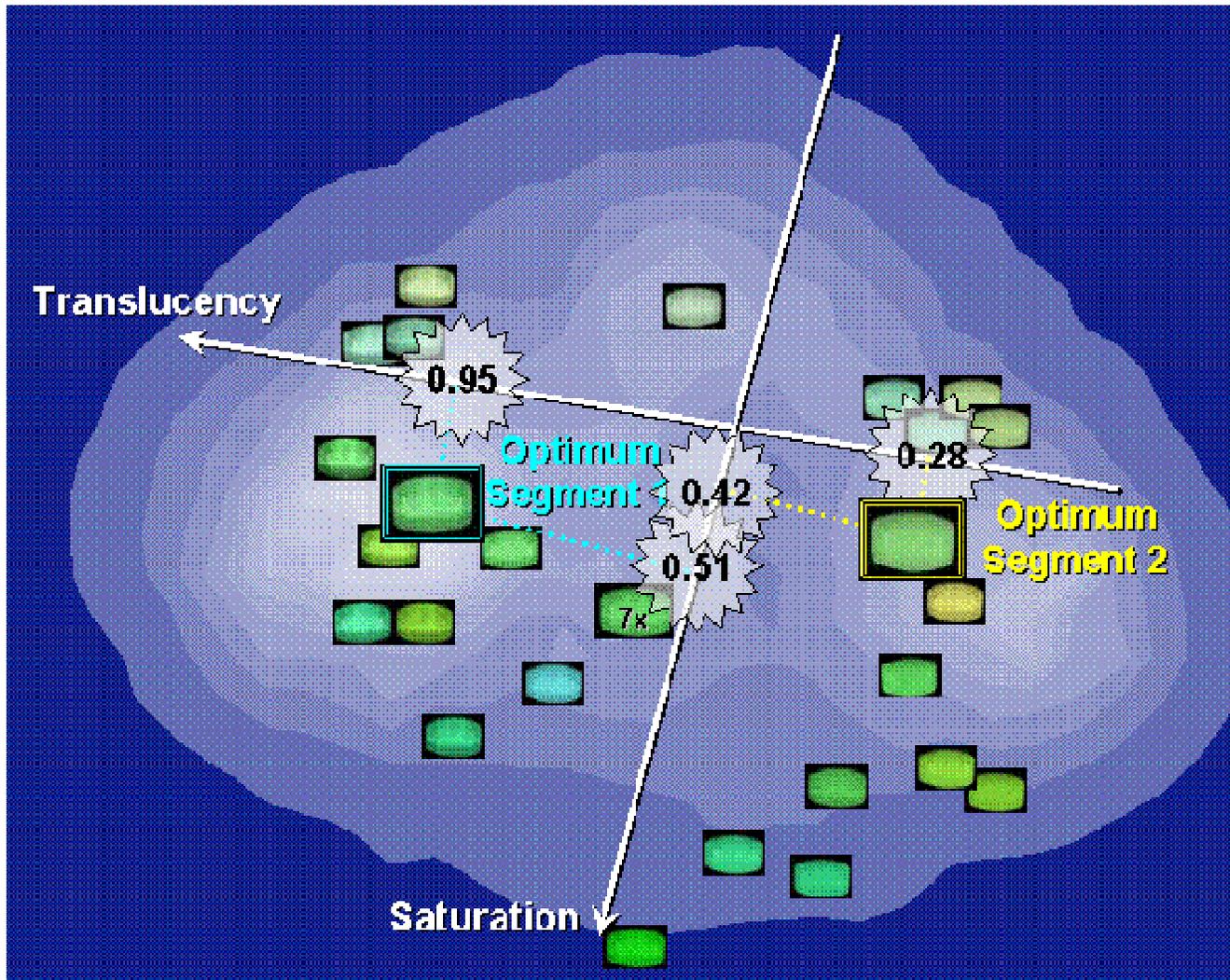


Refreshing Perception: Optimum





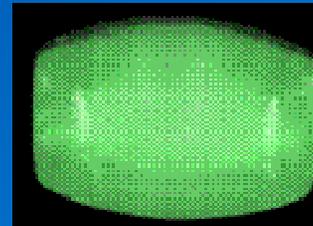
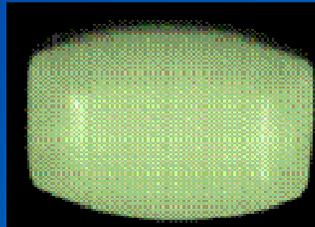
Combined Moisturizing & Refreshing LSA



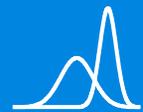
6th Rose Marie Pangborn Symposium
Harrogate, UK
August 7-11, 2005



**A New Tool to Optimize Product Characteristics
and Study Population Segmentation**

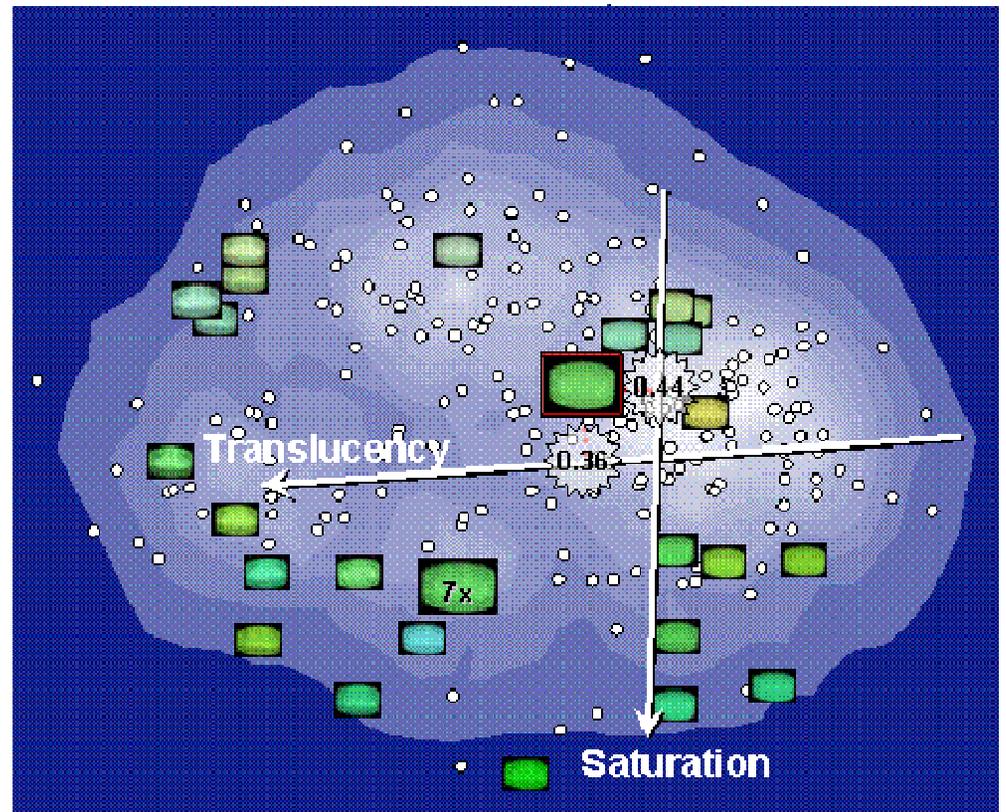


CONCLUSIONS



Conclusions

- LSA was successfully applied to the investigation of perceived *moisturizing* and *refreshing* properties of soap images
- For the individual as well as for the combined analyses, the population landscape was uncovered
- Translucency and Saturation were identified as drivers for both properties
- The location of the mean consumers' optimum images were estimated
- Using a 'reverse-engineering' approach, the corresponding images were created
- This approach can be readily applied to other types of consumer investigations such as hedonic and product concept investigations

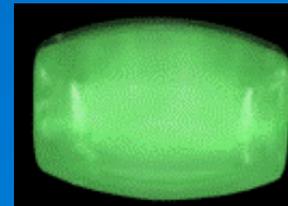


*6th Rose Marie Pangborn Symposium
Harrogate, UK
August 7-11, 2005*



**A New Tool to Optimize Product Characteristics
and Study Population Segmentation**

Any Questions?



www.ifpress.com

