

GATHERING STRUCTURED REFLECTION IN THE FURNITURE BUSINESS BY TREND MAPPING

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ABSTRACT

Setting up the direction for new product designs in the furniture business can be more or less structured and in many situations the idea for new design concepts, constructions, details, colouring or choice of material are directed by random input from retailers or external designers or from studying trend agency reports besides considering other matters like new market strategies etc.

In this paper the authors describe a methodology to create a richer discussion among the manufacturer and the retail partners based upon a collection and structured play/interview using research data collected by design students at an international furniture fair. The first test version of the method was developed and carried out by design engineering students and design researchers in collaboration with a furniture manufacturer and the results and methodology are presented and discussed in this paper.

Keywords: Trend mapping, trend analysis, furniture design, design communication, design engineering students.

1 INTRODUCTION

1.1 Should industrial designers care for trends?

In the history of furniture design, technology and aesthetics have been developed hand in hand with cultural, behavioural and architectural changes, and such aspects are still in play when designing conceptually new chairs or redesigning existing ones. Earlier radically new products like the Wiener-chair [1], the Mies van der Rohe 'Freischwinger' [2] were based upon the exploitation of new industrial production technology at a time where most furniture was manufactured locally at a slower development speed and only smaller details would differ from year to year. The same tendency can be seen through the 20th century where conceptually new chairs in plywood or integrated carbon fibre structures were presented along with variations of (now) older or traditional furniture designs.

The global furniture consumer can now choose among a huge variety of products and subtle details like colours, surfaces and style has become important factors along with basic functional requirements [3]. Even ethical considerations are becoming more important for the global consumer [4].

While the history of design and furniture is well described in literature, only few academic publications deal with the consumers choice of furniture or the decisions that lay behind the manufacturers strive to constantly present new product concepts or variations of existing models. Burnsed & Hodges, claim that "although the home furnishings case goods industry is a significant consumer goods market, little academic research has been conducted. To date, general home furnishings research has primarily been conducted by industry, government agencies, and lobbyists. Consequently, not much is known about the home furnishings case goods consumer. Few academic studies have addressed what is important to the consumer when making a home furnishings consumption choice." [3]. Most furniture manufacturers today rely on the input from external designers or the efforts and observations of an in-house R&D-department when developing new products. Some furniture manufacturers even buy expertise from trend-agencies when deciding the colours for the next collection, hence following a tradition known from the textiles industry (fig.1).

It is hence important for furniture-oriented industrial designers to be able to master the conceptual design approach along with the ability to integrate the current and rising trends in culture, aesthetics and technology.

At XX university we have for 15 years run an industrial design academic program with much emphasis on strengthening the students' conceptual design approach while more or less neglecting the

trend-aspect or furniture in general. Last year industrial design candidates from XX university won the two most important national furniture competitions hence making us aware that we could focus more in this area while at the same time developing tools to improve the manufacturers communication with customers, designers and retailers on this matter.

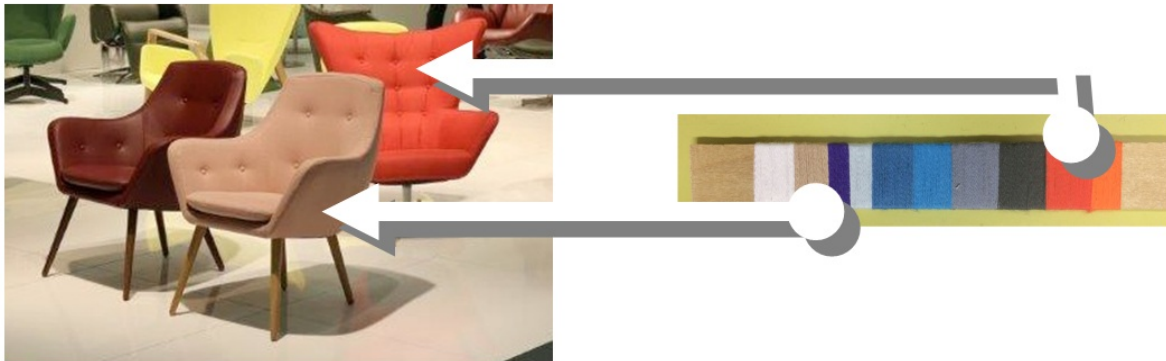


Figure 1. Colour-scale recommendations from the Trend-agency and manufacturer X's new product presentation at a 2015 furniture fair

1.2 The main furniture trend categories

To put more focus on the topic of trends in the furniture industry we have been observing international furniture fairs from 2013-15. Every year a group of 130-140 students were sent to the Salone del Mobile in Milan to observe and report '*phenomena in form, surfaces, details, materials, general compositions etc. which can be said to express a current or new trend*'. Early results of this research was published in [5] and these results were sorted and later reduced into 6 main categories that are partly overlapping.

It is important to notice that the categories not only deal with aesthetic elements but also construction principles and more technical matters like manufacturing technology, hence covering a broad range of perspectives relevant for *integrated design* practice and education[6]. The main categories were:

1. Materials & Manufacturing methods
2. Surface, Colour & Texture
3. Form, Structures & Elements
4. Green/Environment
5. Thematic Form Concepts, Motives & Details
6. Product Categories & Use

An example can be seen on Fig.2.

The gathered trends do not represent an objective truth per se and some of the trends might already be fading, but the material has been useful as a turning point in discussions with industrial design engineering students at different levels. This experience lead to the idea of testing the use of such trend registrations as a tool for communication and clarification involving a furniture manufacturer X (see fig 1) and its retail customers A&B.

2 TREND REGISTRATION CARDS AS A COMMUNICATIVE TOOL

2.1 The Trend Discussion-system

While colour maps or trend reports from professional agencies can provide more or less structured reports on aesthetic tendencies and phenomena gathered by external researchers to use by the furniture manufacturers, such reports do not automatically provide company communication with the end-user or the retailers. We therefore wanted to test if the above mentioned trend mapping by industrial design students could in any way be useful as a tool to enhance communication or at least clarify differences in stakeholder views. In this first test-case we focused upon the retailer/manufacturer relationship and got in contact with company X and they allowed us to contact the retailers A&B to test the Trend-Discussion-System on both parts.(Table 1).

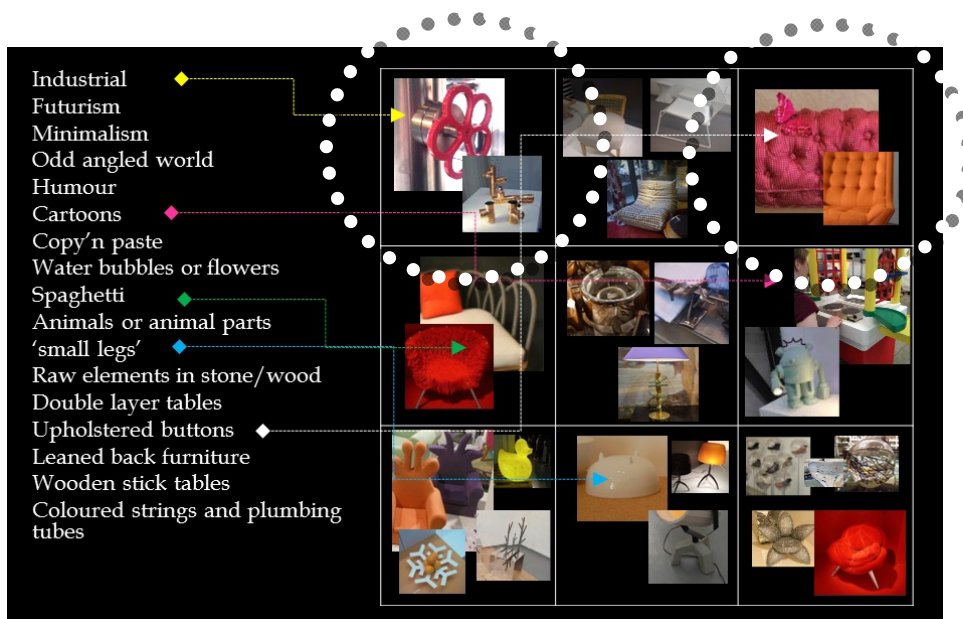


Figure 2. Example on students' Trend Registration theme 5: 'THEMATIC FORM CONCEPTS, MOTIVES & DETAILS'. The trend 'Industrial' is illustrated in circle top left and 'Upholstered Buttons' is illustrated in circle top right

The test-system consisted of only few elements:

- 16 cards sized 8x8cm each with a picture of one variety of trends from category 1-6 mentioned in chapter 1.2.
- An A3-board picturing a simple arrow-formed scale ranging from 0-100%

The system was hence presented in different tests with 5 different persons, who were individually asked to situate each card according to a range of questions like:

Q1: Are there any trends that will disappear or become more prominent? (in general)

Q2: 'Which trend/trends would you prefer company X to implement in new products? (the specific manufacturer X)

Q3: 'What will be in the market in the future? (at the specific retailer)

Each individual test would take less than one hour and questions with identical focus were given to all participants but leaving place for the test-persons to comment or argue for their ranging according to each topic. The test-persons were also given the possibility to write additional cards themselves if they needed more topics. This option was used a couple of times by the retailer representatives.

The five test situations were made individually with the following persons:

Table 1. Test persons from company X and retailers A&B

Industrial designer at manufacturer X
Product manager at Manufacturer X
Store manager at Retailer A
Purchasing manager at Retailer A
Store manager at Retailer B

2.2 The test results

When all the cards were positioned on the 0-100 scale-arrow the interviewer noted the position of each scale and made graphic representations for later analysis, where 0 is to the left and 100% at the point of arrow. Simplified examples of the representations of the scales can be seen on Fig.3, 4 & 5.

3 INTERPRETING THE MAPPINGS

3.1 The sub-categories

The following interpretation of the mappings are based upon the different test persons ranging of the cards on the scale-arrow and adjusted by supplementary verbal comments given by the test persons during the session. We have chosen a few categories out of the 16 cards that most clearly show similarities and differences in the choices of each test person. The sub-categories and the abbreviations used in fig.3-5 are:

- *Multi functionality*
- *Industrial look (see fig.2)*
- *Weaved structures*
- *Pastel colours*
- *Upholstered buttons (see fig.2)*
- *Felt*

These categories cover a broad variety of the main trend categories mentioned in chapter 1.2 meaning that trends in colour, materials, structural elements and thematic form concepts are represented in the above mentioned sub-categories. The following cases describe possible explanation and interpretation of the illustrated results.

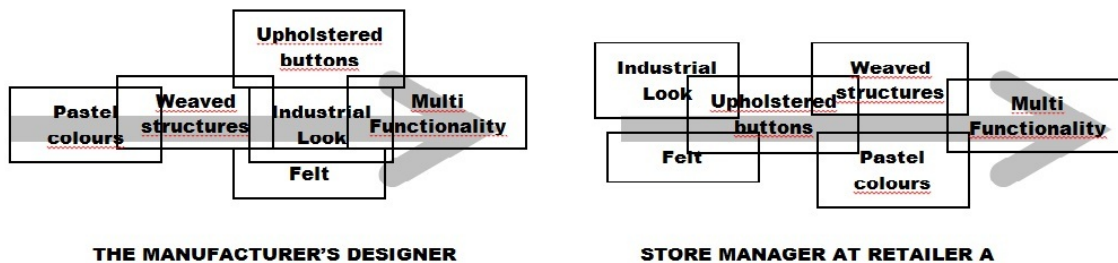


Figure 3. Representation of 2 respondents' priorities concerning Q1: GENERAL TRENDS

3.1 General furniture trends rated by industrial designer and store manager

When looking at fig.3 referring to question 'Q1' it is clear that the manufacturer's industrial designer (left) and the store manager A (right) agree upon a coming desire for more multifunctional furniture *in general*. It also seems like they both expect the trend in 'upholstered buttons' and the 'industrial look' to be relevant in the coming years. While the industrial designer has more attention to the use of felt in future products it seems like the store manager does not fully agree that this is a strong trend. He believes more in pastel colours while the industrial designer seems to rate this as a fading or unimportant *general* trend by rating it lower. The same pattern is shown when it comes to the weaved structures trend, where the store manager added, that he himself saw a huge rise in products at different occasions from lamps and chairs to sofas etc. while the industrial designer found that rather uninteresting.

3.2 Trends for manufacturer x rated by id & purchasing manager

When looking at fig.4 referring to question 'Q2' the question aims to clarify which trends the manufacturers industrial designer (left) and the purchasing manager A (right) expect to be relevant as future trends for the *specific* manufacturer (X). The designer and the purchasing manager are directly involved in deciding which trends to implement in future products from manufacturer X as company A is an important retailer. It is therefore fruitful if they agree on this direction. The designer found 'upholstered buttons' being very relevant for the furniture manufacturer in the near future while the purchasing manager estimated that this particular trend had been used much already and should not be given more attention. The 'Weaved Structures' also was prioritized differently as the purchasing manager thought it would be interesting to see also in chairs while the industrial designer saw no possibility to make such products in the current manufacturing set-up, although he did not ignore the trend totally. They both agreed that 'Pastel Colours' should be available in the future portfolio from

company X, and the ‘Multi functionality’ was highly prioritized as well. This trend or feature has traditionally been given a high priority in company X’s product portfolio on reclining chairs and the high priority of this topic by both respondents therefore might just emphasize a recommendation for manufacturer X to follow the existing product policy and not necessarily to add even more multi functionality.

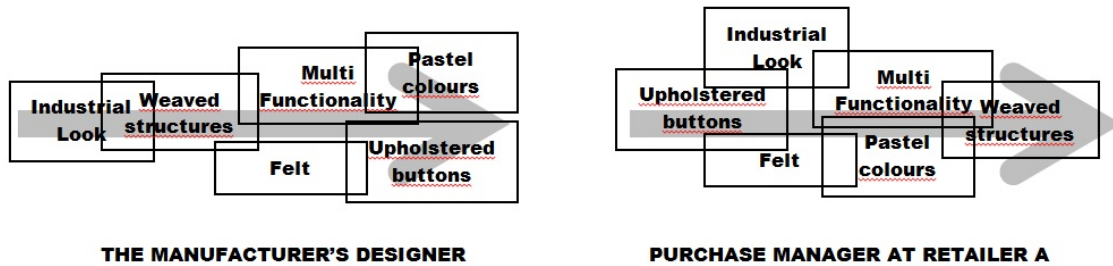


Figure 4. Representation of 2 respondents' priorities concerning Q2: Preferred trends for manufacturer x

3.3 Trends in the future rated by product manager and purchasing manager

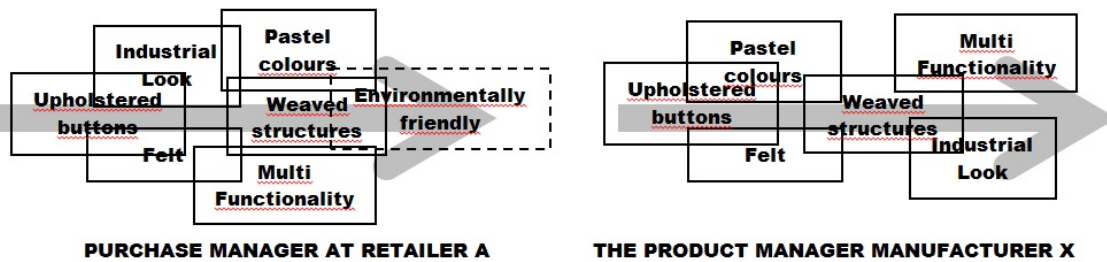


Figure 5 . Q3: Preferred trends for the specific retailer/store

We also tested a situation, where 2 different persons were asked to individually use the rating scale while the other person commented simultaneously. This situation created a much more lively conversation with more detailed topics being exposed. Fig.5 shows the ratings by the product manager from manufacturer X and the purchasing manager from retailer A concerning the trends that were relevant for retail store A in the future. Both agreed upon the position of the ‘Upholstered Buttons’, ‘Felt’ and ‘Multi functionality’ cards. They disagreed about the position of the ‘Industrial’ card, where the product manager found it very relevant while the purchasing manager rated it lower. The clearest difference in opinion was exposed when the purchasing manager stressed that *environmentally friendly* products would be highly relevant when choosing products for their stores. He therefore insisted on adding a new card on this topic and placed the ‘Environmentally Friendly’ card as the top priority in his rating. On fig. 5 it is represented by the box with the punctuated outline.

4 CONCLUSIONS

4.1 Evaluating the method and results

The aim of this process was to test whether a huge amount of trends observed and reported by students could be transformed into a tool that would clarify similarities and differences in the rating of different furniture trends as seen by an industrial designer and other stakeholders.

The intention was also to enhance the communication on such matters between the different stakeholders by discussing the different mappings with them. Improving this communication might

help the industrial designer and the manufacturer to more precisely refer to and pick up current trends and expectations from future customers and integrate such aspects in future design proposals.

This test was the first attempt to use the set-up and not all of the intentions were successfully honoured. Only one company and 2 retailer companies were involved in the test, but still a variety of different attitudes and priorities were exposed in a simple and transparent manner. Of course they only expose a limited variety of matters that count when deciding which products to design or to purchase for the store. Price, safety, terms of delivery and other matters are highly important aspects to consider when making decisions in this field.

Nevertheless it is our opinion that the method itself is so promising that we intend to follow up on this pre-test and set up a broader and more trustworthy -test with more manufacturers and in such case we also intend to follow up on the mappings by more in-depth interviews with the stakeholders when confronting them to the mappings made by the other stakeholders interviewed.

Even though the specific trends were presented on the cards with a photo-collage and a short headline, the system still to a great extent depends on the interpretation by each test-person. The sub-topic 'Multi functionality' can have many meanings and a deeper interview could have clarified any conflicting interpretations of this topic. It is therefore important not to see the mappings as true representations of the rating of future trends. The mappings should be seen as a discussion platform that also inspires new insights in a playful and involving way. This intention was most clear in the situation where the Purchase Manager (see fig. 5) made a cart of his own claiming that ECO-friendly furniture might be the most interesting future trend to follow. This act made clear that the 'truth' not necessarily lies in the mapping itself but maybe *in between* the *different* mappings and the discussions. The authors find this approach important when dealing with such delicate matters and a point to keep in mind for future industrial design students or professionals who might try out the method themselves. .

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