2 Constructing environmental friendliness:

The case of the German "Blue Angel"

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Today's product market is rich in different product labelling schemes, ranging from fair-trade to various eco-labels on national and international levels. A few decades ago this was not yet the case; only very few labels existed. The very first eco-label was the German Blue Angel which was founded in 1978. It is by now one of the most commonly known eco-labels certifying environmentally friendly products in Germany and abroad. It initially started with only a few product categories however, the Blue Angel is currently being used by around 980 producers, 21 per cent of which are foreign suppliers. The label is borne by over 11,000 products including for instance, furniture, varnish, paint, electrical devices and paper (Der Blaue Engel, 2011).

Despite the fact that there was not much experience or other examples of environmental labelling to rely upon during the foundation of the Blue Angel, it has proven to be more successful than one may have expected. It has also had significant influence on various production processes and served as a model for other labelling schemes: other labels, such as the Nordic Swan or the EU Eco-label, which emerged about a decade later, based themselves on the Blue Angel⁸ (Jordan, Wurzel & Zito, 2003). Due to its special standing as the first eco-label and as one of the most well-known and influential labels in the world, this paper presents a historical account of the constitution of the Blue Angel. In recent years, the Blue Angel system has become a much debated topic in social, cultural, political and economic science, often focusing on evaluation studies of the Blue Angel (Brockmann & Hemmelskamp, 1995; Brockmann & Hemmelskamp, 1997; Dietrich, 2008; Grote, 2009; Horne, 2009; Jordan, Wurzel, Zito & Brückner, 2009; Zakrzewski, 2009).

In contrast to these existing studies, I want to take a more distanced social scientific approach by analysing the Blue Angel's main characteristic, namely its environmental friendliness. We attribute environmental friendliness as the focal value to products labelled with the Blue Angel. This label certifies environmental friendliness as a profound and distinct indication of quality for all Blue Angel certified specific products; in contrast

⁸ Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011.

to unlabelled products, which are recognised as being less environmentally friendly. As I will show in this paper, such qualities were far from self-evident or clearly defined. Furthermore, the boundaries of what constitutes environmental friendliness have been the object of constant readjustment and sometimes even open conflict within this labelling system.

With the historical approach I have taken, the processes through which environmental friendliness has been shaped during the development of this labelling system and how certain standards of environmental friendliness evolved will be analysed. I will attempt to answer the question of why a need for labelling arose at all and how the idea of environmental friendliness and the Blue Angel have developed over time.

To answer these questions, I conducted research in the German federal archive in Koblenz, Germany as well as in the archive of the German Institute for Quality Assurance and Certification (RAL), near Bonn, Germany which is home to all Blue Angel documents. Furthermore, I held a semi-structured interview with Henning Scholtz, legal counsel at RAL. Two additional semi-structured telephone interviews were conducted. Firstly, with Dr. Hans-Hermann Eggers, head of the subject group "environmental labelling" and director of the Environmental Label Jury office in the Federal Environmental Agency (UBA) in Berlin. Secondly, with Prof. Dr. Edda Müller, who has been very closely involved with the Blue Angel since 1977. Prof. Dr. Edda has also worked both in the UBA and in the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) and is also vice-chair of the Environmental Label Jury.9

The analysis starts with the presentation of a theoretical framework as a guiding line throughout the paper. Secondly, the focus will be on the period preceding the foundation of the Blue Angel, the subsequent demand for the latter and the first ideas about environmental friendliness. In a third step, this paper will deal with the struggles that the label had to face in the first years following its establishment. Fourthly, the problems related to defining the concept of environmental friendliness in the 1980s will be analysed. Finally, a turning point in the history of Blue Angel during the 1990s will be presented and recent product examples will be demonstrated, before concluding with some final remarks.

⁹ I would like to thank Henning Scholtz, Hans-Hermann Eggers and Edda Müller for their time and effort and particularly Henning Scholtz for contributing to my work by letting me visit RAL and by providing me with the required information and material.

Theoretical framework: The standardisation of environmental friendliness

In order to better understand the idea and purpose behind the creation of an eco-label, I shall seek to analyse the idea of environmental friendliness with regard to the history of the Blue Angel more thoroughly. Environmental friendliness is the focal value that is attributed to the Blue Angel eco-label, enabling consumers to choose between different products and promoting the use of more environmentally friendly production technologies. This focal value, however, can be understood in very different and subjective ways. As the German Federal Court posted in a verdict in 1988: "[People have] differing perceptions as to what extent (. . .) a product can be environmentally friendly" and environmental friendliness itself does not have an "explicit and clear delineated content". For this reason, it is even more important to get a deeper insight into the meaning of environmental friendliness.

To do so, I will make use of scholarship on standardisation in order to analyse how environmental friendliness has become a standardised notion over time. Taking a closer look at our everyday lives, we encounter standards in a variety of situations: ranging from the standardised package of cheese we buy in the supermarket to standards for many characteristics such as size, shape and colour as well as certain functions. As the sociologists Geoffrey C. Bowker and Susan Leigh Star (2000) define it, a standard is "any set of agreed-upon rules for the production of (textual or material) objects" (p.150). Although standards might be more commonly related to material or technological objects, a standard can also refer to a textual definition or a concept, as in the case of the focal values of products. Thereby, a standard encompasses "more than one community of practice (or site of production)" (Bowker & Star, 2000(a), p.13). Generally, standards involve several other features or dimensions: they are mostly established by the state, a legal body or an organisation. There is no law stipulating that the best standard shall be the winner and they "are often deployed in the context of making things work together" (Bowker & Star, 2000, p.150.). This definition also applies in the case of the Blue Angel: It was established by the state and other organisations, it is not based on any law and it is deployed in the context of supporting environmental protection. In line with this, standards often evolve as a "result of negotiations and conflict" as will become clear later (ibid., p.157).

With this definition at hand, I will trace the standardisation and contextualisation of environmental friendliness. In this process, different actors from different backgrounds –

¹⁰ Bundesgerichtshof, Urteil vom 20.Oktober 1988- IZR 219/87- Oberlandesgericht Köln. (RAL Archive).

or what Anselm Strauss (1978) first described as so-called social worlds – have influenced the course of definition. A closer look will be taken at the interaction between different stakeholders, namely the political and governmental institutions, administrative levels, firms, commerce, industry, environmental and consumer groups. In this process, the most important roles are those of the institutions involved in the structuring and awarding process of the label: the Federal Environmental Agency (UBA), the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), the Environmental Label Jury and the German Institute for Quality Assurance (RAL), which has been dealing with labelling since the 1920s.

Thus, in the following I will analyse what has shaped the course of environmental friendliness, what has been included and what has been left out in the negotiations surrounding the topic during its application and standardisation.

The pre-Blue Angel period in the 1970s: The conceptual phase of the first eco-label

Environmental concerns been a topic of increasing importance in Germany since the late 1960s. Since then different attempts to improve environmental protection and to reverse pollution through the use of different policy instruments have been made (Galarraga Gallastegui, 2002; Engels, 2006). Considerations regarding environmental policy and the consequent foundations of the German UBA in 1974 and the BMU in 1986 have been acknowledged by various scholars (Wey, 1982; Siemann, 2003; Hühnemörder, 2004; Müller, 2005; Brüggemeier & Engels, 2005; Engels, 2006).

In the course of finding solutions to augmenting pollution and environmental problems, the idea of an environmental labelling scheme was first mentioned in the environmental programme of the German government in 1971. An important concern at that time was the increasing hole in the ozone-layer, the worsening of air and water quality and wide-spread forest decline (*Waldsterben*) (25 Jahre Blauer Engel, 2003). In addition, the problem of product packaging and consequent wrapping waste as well as water pollution became a major environmental issue, which led several organisations to take an interest in this matter and to consider the idea of an environmental label in order to protect the environment and improve air and water quality.

¹¹ Bundesregierung, Umweltprogrammem der Bundesregierung. September 30, 1971, BT-Drs. VI/2710.

For example, on 26 April, 1972, the Hessian minister of agriculture and environment addressed a letter to the independent German institution responsible for quality seals (*Gütezeichen*), RAL¹² This letter stated that the working group II 'water, wastewater, waste disposal' of the Hessian advisory board for the environment had dealt with the "the problem of packaging" in a former meeting. "Thereby the question was posed, whether it would be possible and reasonable to introduce a seal of quality for environmental friendly packaging".¹³ However this topic was simultaneously being critically addressed by the media: the packaging industry's specialist journal 'Verpackungs-Rundschau' stated that "modern environmental consciousness shows some phenomena of hysteria" and that "[t] here is really no sense in conferring such environmental quality marks" (Strecker, 1972). This example shows very clearly that the idea of an environmental sign met significant resistance from stakeholders and was not as strongly supported by the private sector as the government had hoped for.

Quality seal vs. eco-label

An important point here is also that the conflict centred on the question whether the label should be introduced as a seal of quality (Gütezeichen) or as an actual eco-label (Umweltzeichen). At first, negotiations focused on the creation of an environmental seal of quality, which had been put forth by the Minister of the Interior in 1972. During this time, the word 'quality seal' was solely mentioned in all documents. However, a particular problem was the meaning of the two different certification methods: while a quality seal involves strict external and constant controls of the certified product, an eco-label has less stringent requirements than a certification mark.¹⁴ In addition, environmental experts feared that the use of an environmental quality seal could lead the consumer to assume erroneously that the label has to undergo the same strict requirements as the RAL certification mark. Moreover, an eco-label is simply awarded for a certain period of time and does not involve any legal requirements, in contrast to a quality seal. For those reasons, the creation of a quality seal was consequently discouraged as this undertaking was seen as "dubious and not feasible". 15 Despite the fact that environmental friendliness was not particularly mentioned in this discussion process, the decision for an eco-label instead of a specific quality seal indicates a first move towards a more standardised comprehension of environmental soundness.

¹² Reichsausschuss für Lieferbedingungen, Deutsches Institut für Gütesicherung und Kennzeichnung e.V.

¹³ Der Hessische Minister für Landwirtschaft und Umwelt. Wiesbaden, den 24.04.1972. (RAL Archive).

¹⁴ Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011.

¹⁵ Brief an das Referat W/IV A 1. 28. Februar 1972 (RAL Archive).

In a meeting on 19 May, 1972, representatives of the federal ministry of the interior as well as representatives of RAL met for the purpose of creating a label in response to a letter by the federal ministry of the interior, which had requested the issuing of an eco-label. The idea of establishing a quality seal was again clearly dismissed during this meeting, due to the legal obligations that might arise with a quality seal. It was not mentioned in the protocol which persons exactly discouraged the idea of the seal. Therefore, an alternative system based on three formal pillars was advocated: Firstly, a commendation in the form of a medal for companies which, for instance, contribute to the protection of the environment by particular activities. Secondly, a clear identification on the product, but limited to the statement of the achieved environmentally friendly effect. Thirdly, an informative identification of a product in relation to the RAL criteria.

The ministry for the interior, which was at that time responsible for environmental protection then drafted several internal proposals relating to the creation of an environmental sign. However, the issue was only taken up again when Hermann Biechele, MP of the German Bundestag, posed an official inquiry in Parliament during the 96th session of the German Bundestag in 1974 as to how the government would position itself towards the creation of an environmental sign. Although the government's response by the federal minister of the interior, Hans-Dietrich Genscher, represented the government's general positive attitude towards labelling of particularly environmentally friendly products and manufacturing processes, any legal regulation was not intended. Furthermore, it mentioned that "the awarding of an official seal of quality was not considered, since the related obligatory controls and guarantees could pose legal and actual problems".

Although the government clearly stated its positive position towards an environmental sign, it was also clearly hesitant due to legal and formal regulatory concerns and did not want to get involved in the creation or the issuing of an eco-label itself. However, it proposed an "investigation as to its practical implementation" and "expressed its intention of approaching this task in collaboration with the RAL".19

Besides the rather indecisive position of the government, another hindrance to the establishment of the eco-label was the fact that the industry in addition to the federal

¹⁶ Der Bundesminister des Innern. Bonn, den 3. Mai 1972 (RAL Archive).

¹⁷ Aktenvermerk. Besuch im RAL am 19. Mai 1972. (RAL Archive).

¹⁸ Auszug aus Deutscher Bundestag. 96. Sitzung. Bonn, Freitag, den 26. April 1974.

¹⁹ Seal of Approval Awarded for Environmentally Sound Products. Translation Bureau, Canada. January 9, 1984. (RAL Archive).

association of the German Industry BDI²⁰ in particular, was not best pleased with the idea of an environmental sign.²¹ Generally, "[i]ndustry gave lip service to the idea but refused to actively cooperate in the participatory forums and round tables created for the programme" (Müller, 2005, p.25). "We do not want it, we do not need it" was the general opinion of the industry on an eco-label, besides arguing against the label because of the immense costs which were associated with its introduction (ibid.). Therefore, industry representatives tried to impede further negotiations, arguing that there were already too many product signs on the market that could lead to unfair competition.²² Especially the electrical industry and the German organisation for machinery and industrial equipment²³ declared themselves vehemently against the creation of an environmental label. The latter opinion was justified with the argument that the existing technical association VDE²⁴ already provided sufficient labelling via the use of their own sign and that the only option would be to include environmental aspects to this particular sign (ibid.).

The above demonstrates that this early interjection of two different social worlds, namely the government and the RAL on the one side and industry on the other, led to severe disagreements with regard to the establishment of an eco-label. By the interaction of these worlds and through the long and tedious negotiations which ensued, the establishment of the Blue Angel was prolonged significantly. At the same time, the conjuncture of the social worlds affected the development of the eco-label and the negotiations relating to what was to be considered as environmentally friendly even though environmental friendliness was not yet given much attention as a concrete concept. Finally, the Federal Environmental Agency requested RAL to examine the feasibility and possible criteria for an environmental sign in cooperation with government and industry. This feasibility study was to include consumer and economic interest groups (Neveling, 2000).

Therefore, many different social worlds, not only the industry or the government, (which launched the idea of an eco-label in the first place) but also consumer and environmental groups as well as individual companies all played a role in the creation of the eco-label. All of them are "in this sense members of various social worlds – communities of practice – that conduct[ed] activities together" and which influenced the path of the label as well

²⁰ Bundesverband der Deutschen Industrie e.V.

²¹ Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011.

Bericht über die Aussprache zwischen Umweltbundesamt, BDI und RAL am 27.11.1975 im BDI, Köln. (RAL Archive).

²³ VDMA (Verband Deutscher Maschinen- und Anlagenbau e.V.).

²⁴ VDE (Verband der Elektrotechnik Elektronik Informationstechnik e.V.).

as the development of an understanding of environmental friendliness (Bowker & Star, 2000a, p.294).

The evolution of environmental friendliness

In the course of conducting those activities and negotiations, the aspired purpose of the label was to identify *particular* environmentally friendly products and to reinforce the usage of these products and production techniques in order to improve the environmental situation overall as well as in particular areas, such as air or water (Schirmer, 1980). Previous discussions had already shown that there were "specific areas of economic participation", where efforts to demonstrate "particular environmental friendliness" could be identified. As the former RAL Director Wolfgang Schirmer stated in a letter from December 1975, "different types" of labelling and different ways "of how to express environmental friendliness" exist. Consequently, it "needs to be discussed where to set the exact level of environmental friendliness" with regard to finding a solution to labelling.²⁵

This historical development demonstrates that environmental friendliness was not a pre-existing, self-evident definition but developed over time both as a concept as well as a social and political necessity. Several aspects of environmental friendliness, such as the scope and focus of the label, also had to be considered, which was particularly difficult when dealing with many different product categories and different interest groups. Obviously, one product might be more environmentally friendly than another and different beliefs existed, which still exist today as to when "a product can be considered environmentally friendly or not". ²⁶ Consequently, the first standardisation took place by focusing on the idea of *particular* environmental friendliness of a specific product.

However, it soon became clear that there were no conclusive answers to the environmental problems at hand and that there were different perceptions as far as the necessity for labelling and the determination of environmental friendliness was concerned. Additionally, the costs involved with the creation and maintenance of an environmental sign were also a concern: "Although one cannot generally equalise environmental friendliness with higher costs, a compensation for the arising costs to the users has to be found".²⁷ This argument was one of the main reasons why specific industries, such as the chemical industry, were either reluctant to support or even rejected the creation of an environmental label.

²⁵ Schreiben vom 12.Dezember 1975 Schi/Sg RAL. (RAL Archive).

²⁶ Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011.

²⁷ Ergebnisbericht über die Sitzung am 19.5.1976 im Hause des RAL, Frankfurt zum Thema "Möglichkeiten einer freiwilligen Kennzeichnung umweltfreundlicher Produkte und Produktionsverfahren" (RAL Archive).

By the end of 1975, the RAL was officially charged by the UBA to analyse various possibilities for product labelling in order to find a consensual solution. The fact that RAL was finally chosen to coordinate the negotiations influenced the Blue Angel in a certain direction. However, negotiations often proved to be ineffectual as the industry continued to reject the creation of any eco-label, while consumer associations, for instance, actively strived to find a solution (Neveling, 2000). In May 1976 the various parties finally came together to a meeting at the RAL institute to discuss the possibilities of a voluntary labelling scheme. A representative of the employers' association AGV²⁸ stated "that there are hardly any 'solely environmentally friendly' products, and that the point should be to merely distinguish between more or less environmentally friendly products".29 This claim was motivated by the argument that every product is harmful to the environment in one way or another and that many eco-friendly products, such as bicycles, are not even being labelled- a problem that will be returned to later. Among the different stakeholders, inter alia RAL, AGV, UBA and the industry, it became apparent that a reliable labelling scheme was necessary and that the "problem of labelling [was] very complex and surely not easy to solve". Consequently, there was a consensus that the environmental sign was not to be awarded too easily in order to avoid the belittlement of pollution or environmental stresses as well as to prevent confusion for consumers. Therefore, labelling of those products that were deemed more environmentally friendly than others seemed desirable. However, it took three more years to finally come to a workable solution.

In 1978, in order to resolve the deadlocked discussions, several expert teams were established for five different product categories in order to develop solutions by mutual agreement. These five product categories, which had already been considered and debated before, included lawnmowers due to noise pollution, returnable bottles as a result of waste production; refurbished tires because of health concerns and air pollution; and lastly, graphical paper and coloured textiles because of water conservation and water pollution. However, these negotiations also failed, since no consensus could be reached on the criteria for labelling (Neveling, 2000). One of the main reasons for this failure was again the obstructive position of the industry during the negotiations, as its representatives feared that the introduction of an environmental sign could be the first step towards statutory requirements. Consequently, the introduction of an environmental label as such

²⁸ Arbeitgeberverband.

²⁹ Ergebnisbericht über die Sitzung am 19.5.1976 im Hause des RAL, Frankfurt zum Thema "Möglichkeiten einer freiwilligen Kennzeichnung umweltfreundlicher Produkte und Produktionsverfahren" (RAL Archive).

was again put in question by the industry. Only when the German *Länder* exerted pressure towards the creation of an environmental labelling scheme by threatening to introduce such system by law on state level, did industry agree to participate in further negotiations and became less obstructive to the introduction of an eco-label (ibid.).

Finally, after many debates and major uncertainty about how to establish a label it was decided to appoint an independent Environmental Label (*Jury Umweltzeichen* comprised of representatives of environmental organisations, unions, the church and the state for the purpose of awarding particular environmentally friendly products. On June 5, 1978 the Jury came together for the first time in Bonn and decided upon the environmental criteria for the first five product groups which were identical to the ones established earlier (ibid.).

Since 1986, the BMU has been the owner of and the responsible authority for the correct use of the eco-label, while RAL, the Jury and the UBA are the three institutions involved in the labelling procedure. This procedure is divided into three steps: firstly, the development of the criteria by the UBA, secondly, the consequent organisation of expert hearings by RAL and thirdly, the final decision by the Jury (Scholtz, 2004). Any company wishing to use the Blue Angel for its products can apply for the label and if the criteria are met, the label is awarded for a fee.³⁰

The first years of the Blue Angel: reconciliation or aggravation?

On 5 June, 1979, on the 'day of the environment' the now former Minister of the Interior, Gerhard Baum, presented the result of the institution by awarding the Blue Angel ecolabel for the first time.³¹ By awarding the eco-label, the government attempted to "set new impulses for a consumer-oriented environmental policy". The sign was to be issued for those products which "distinguish themselves as particularly environmentally friendly without sacrificing their utility or safety". The sign was to "enable the consumer to participate in environmental protection".

For a complete overview of the institutional setting and the awarding procedure of the Blue Angel, see Müller, E. (2005). Environmental labeling, Innovation and the Toolbox of Environmental Policy; Lessons Learned from the German Blue Angel Programme, in M.T. Hatch (ed.) *Environmental Policymaking: Assessing the Use of Alternative Policy Instruments*. New York: State University of New York Press.

³¹ Pressemitteilung vom BMI. 05.06.1979 (Bundesarchiv).

The five different product groups mentioned above received the first eco-label in that year. One of these products was aerosol cans, mostly used for hairspray or deodorants, which were awarded with the Blue Angel label when free of CFC (chlorofluorocarbon); a chemical that was one of the major contributors to ozone depletion and a clear concern for the government during the 1970s and 80s. Despite the awareness of the dangers of CFC, the actual causes and effects were not yet as clearly established as they are today. Yet, other countries such as the USA, Canada, Norway and Sweden had already successfully banned the use of this chemical and showed that good alternatives, such as pump sprayers, existed.³² Since "it is often difficult for the layman to distinguish those factors which determine the particular environmental soundness of a product", it was decided that "an expert opinion, expressed by means of a special marking" would be helpful and needed.³³ By assuming that the average person would not be able to identify a product's specific environmental friendliness, specific experts were involved in and influenced the standardisation of environmental friendliness.

Thus, by aiming to support the alternative production of product dispensers, the Blue Angel wanted to show: "[t]here are also solutions without these harmful substances".34 The goal was to aid the consumer and to promote environmental awareness as well as to support those products that were less harmful to the environment. Yet, it was not without difficulty to promote the use of the Blue Angel for aerosol cans. Again, the industry tried to stand in the way of the eco-label. A specific case concerned a producer for non-aerosol pump spray cans that was threatened by the Association of German Chemical Industry (VCI) that "it would not get any new orders from the producers of these substances if it did not stop advertising its cans with the Blue Angel" (Müller, 2005, p.29). After the UBA and the Federal Cartel Office were engaged in the conflict, the VCI "was obliged to publish a statement in its official magazine indicating that VCI did not oppose advertisements for CFC-free products with the Blue Angel and acknowledging that the decision to do so remained entirely with individual companies" (ibid.).

Only ten years later, in 1989, did the environmental sign for CFC-free aerosol cans 'RAL-UZ 3' expire since all products were by then free of fluorocarbon as a propellant. In the same year, a German regulation came into force prohibiting certain ozone damaging chemicals³⁵

^{32 &}quot;Das Umweltzeichen oder die Sprech vom Weizen unterscheiden". n.d. (1979). (RAL Archive).

Seal of Approval Awarded for Environmentally Sound Products. Translation Bureau, Canada. January 9, 1984. (RAL Archive).

³⁴ Dr. Hans-Hermann Eggers, UBA, telephone interview by the author, 16 May, 2011.

³⁵ FCKW-Halon-Verbotsverordnung.

(Umweltzeichen für Haarsprays, n.d.). In this case, the Blue Angel succeeded as a 'soft instrument' addressing and solving a specific environmental problem before it was regulated by the government.³⁶ Hence, in retrospect the example of aerosol cans can be considered a complete success of the Blue Angel since these cans no longer exist anymore today.

However, not all decisions were made straightforward or easily. Especially in the establishment of the Blue Angel, collaboration with the UBA was difficult and there were a "number of problems the RAL encountered because of its role of the organiser and moderator of the discussions".³⁷ This difficult cooperation even resulted in a suggestion by the UBA to replace RAL by a different partner for dealing with issues concerned with labelling. Especially its role as the organising institution put the RAL in a difficult position, as it was often seen as the institution imposing itself on others. As Henning Scholtz described it, the feeling was often that of "what do they want again".³⁸

Nevertheless, it was and still is RAL's obligation to ensure that the Blue Angel is awarded to products that are deemed more environmentally friendly than others in their specific product category. However, this does not mean that the Blue Angel necessarily awards the best product. Neither does it mean that a specific Blue Angel product is environmentally friendly in its entirety, especially since in this case aerosol cans are still harmful to the environment in other regards, such as in their waste production. "Possibly, there can always be something better", as Henning Scholtz said. Furthermore, environmental friendliness is defined and standardised according to specific criteria and on an ongoing basis for each product. New criteria are established by the involved institutions that determine whether a product of this product category is still eligible for the eco-label or not. In this regard, innovation and technology play an important role in reaching environmental standards and can fundamentally change the course of the eco-label: In the case of CFCs, new product technology triggered the path for more environmentally friendly aerosol cans.

³⁶ Dr. Hans-Hermann Eggers, UBA, telephone interview by the author, 16 May, 2011.

Auszug aus dem Ergebnisbericht der Sitzung des RAL-Gesamt-Präsidiums am 4. und 5.11. 1982 im Glottertal, Schwarzwald. (RAL Archive).

³⁸ Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011.

³⁹ Ibid.

⁴⁰ Dr. Hans-Hermann Eggers, UBA, telephone interview by the author, 16 May, 2011; Prof. Dr. Edda Müller, vice chairwoman of the Environmental Label Jury, telephone interview by the author, 23 May, 2011.

Is environmental friendliness 'Green'?

Since the foundation of the Blue Angel in 1979, its principle was to award "particularly environmentally friendly products (...) in comparison to other [similar products] in a holistic view and in attention to all aspects of environmental protection, without thereby significantly worsening their usability or safety".41 As stated here, "products shall be regarded from a holistic view "when awarding a product with an environmental label". However, different criteria are applied for different products when the Blue Angel is being awarded.⁴² Additionally, those criteria change over time as more consumer preferences, research, technology and innovation influence production methods, product safety and usage. For instance, paint has to fulfil different criteria of environmental friendliness than paper or flooring material when applying for the Blue Angel. "[The Blue Angel] is awarded according to a set of criteria which are used to evaluate products. They identify those products which comply with the specified requirements for environmental performance within certain product categories which are chosen by the independent Jury" (Prosler, 2008). The environmental aspect of the product covers only a very specific part of the product itself, such as its production process, its usability or its packaging material: for instance when a product is made out of recycled paper. Therefore, in principle this contradicts the idea of a holistic view respecting all aspects of environmental protection.

It wasn't long before this contradictory situation was noticed by the industry: in 1987 the board of the consumer goods committee of the association of the German industry noted that "the statement "environmentally friendly" is illogical and should correctly be replaced by "more or less environmentally hazardous". Furthermore, it was mentioned that the Blue Angel "is a relative sign", since it does not differentiate or award products that produce very little or no environmental damage and does not fulfil its purpose of informing the consumer about environmentally hazardous or friendly products. In some cases, the Blue Angel "was even awarded to products in defective conditions". As such according to the industry's stakeholders, the Blue Angel did not fulfil its objective to look at a product from a holistic point of view, and with regard to the environmental aspect

Vorschlag des Umweltbundesamtes für die Verleihung des Umweltzeichens mit Begründung. o5.06.1978. (RAL Archive).

⁴² Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011; Dr. Hans-Hermann Eggers, UBA, telephone interview by the author, 16 May 2011; Prof. Dr. Edda Müller, vice chairwoman of the Environmental Label Jury, telephone interview by the author, 23 May, 2011.

⁴³ Stellungnahme des Vorstands des Konsumgüterausschusses zum Umweltzeichen. Umweltbundesamt. Gesch.Z.: I 1.1 – 90 081 – 1/14 (87 I). 10. Juni 1987. (RAL Archive).

of the label the assessment is only one-dimensional. This ambiguity about the idea of environmental friendliness has even lead to a boycott of Blue Angel products in Denmark and a prohibition of advertisement with the title 'environmentally friendly' in Switzerland in the 1980s.⁴⁴

Readjustments of the concept

In response to this dilemma, a suggestion to reform the labelling criteria of the Blue Angel was issued by the federal association of German industry in 1988.⁴⁵ This included the request for a "realisation of experienced, objective and technically reliable principles in the procedure of consensus between the concerned stakeholders". A strong point of criticism was that the notion 'environmentally friendly' was misleading: "[t]he sign even attests "particular" environmental friendliness" and the consumer understands this as an all-inclusive and extensive concept. Several examples have shown that, for instance, the environmental friendliness of a packaging has led to the assumption that the content of the concerned product was also environmentally friendly.⁴⁶ The consumer could thus be misled about the actual range of the product's environmental soundness.

But it was not only industry that criticised the concept of environmental friendliness and the use of it by the Blue Angel eco-label. While they had been mostly favourable in the beginning, organised environmentalists also started to announce their sceptical position towards the Blue Angel environmental criteria. "Similar to consumer associations, they rejected the term environmentally friendly and wanted to see a more fundamental influence of the Blue Angel programme on consumer behaviour" (Müller, 2005, p. 31). More often than not, the Blue Angel was criticised for awarding products in a one-dimensional way without taking all aspects and the whole life-cycle of a product into consideration (ibid.). In comparison, other labelling schemes, such as the "Austrian, Dutch, French and the Nordic White Swan label put significantly more emphasis on life-cycle analysis than the German Blue Angel scheme" (Jordan, Wurzel & Zito, 2003, p.213). Although the first initiations for life cycle assessment (LCA)⁴⁷ in environmental labelling date back to the 1970s, it was only officially implemented in the late 1980s and early 1990s (Klöpffer & Grahl, 2009). Since then, LCA has played an important role in the criteria for awarding the

⁴⁴ Ibid.

Uberlegungen zur Reform des Umweltzeichens. Bundesverband der Deutschen Industrie e.V. Köln, den 19. Februar 1988. (RAL Archive).

⁴⁶ Ibid.

⁴⁷ For a further discussion of life cycle assessment, see Münch chapter 3.

Blue Angel and has changed the focus of environmental friendliness in so far as to include the whole life cycle of the concerned product.

Challenging environmental friendliness

By the late 1980s, the Blue Angel system was increasingly challenged and the label had to face a lawsuit almost every other day.⁴⁸ One example is a suit filed by the registered Association against Nuisance in Commerce and Industry, 49 which claimed that the use of the words 'environmentally friendly' on a label would be deceptive. In the consequent court decision on 20 October, 1988, the court ruled that through the use of this term, "the consumer would generally assume that the product is environmentally friendly per se, although this is only the case for specific aspects".50 The consumer was thus deemed to be misled about the actual kind and extent of environmental friendliness of a product. However, the defendant store owner, however, argued that the consumer would not understand environmental friendliness in such a way that the product would not harm the environment at all, but rather that it is an indication of relative environmental friendliness. Nevertheless, the district court decided in favour of the plaintiff and explained that, in this specific case, the use of the label was misleading as it did not indicate the specific environmental friendliness of the assigned product. In the court's opinion, environmental friendliness as such is an ambiguous concept and could be related to the production or to the usage of a product, or even both. More importantly, there is no absolute environmental friendliness and consumers have diverse perceptions of the extent of a product's environmental friendliness. "Having said that, there were still extensive uncertainties, especially about the meaning and content of the used terms, such as environmentally friendly, environmentally compatible or organic".51

In a similar judgement on the same day, it was ruled that an advertisement for a paper product with the label 'made from waste paper' was also misleading as this would make the consumer believe that the product is made a hundred per cent from waste paper, although this may not be the case. Again, it was underlined that the environmental label does not in the least guarantee the environmental friendliness of a product, but at best lowers environmental pollution in one specific subarea.⁵²

⁴⁸ Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011.

⁴⁹ Verein gegen das Unwesen im Handel und Gewerbe Köln e.V.

⁵⁰ WRP- Wettbewerb in Recht und Praxis. Seite 160- 3/89. Bundesgerichtshof, Urteil vom 20.Oktober 1988 – IZR 219/87- Oberlandesgericht Köln. (RAL Archive).

⁵¹ Ibid.

WRP- Wettbewerb in Recht und Praxis. Seite 160- 3/89. Bundesgerichtshof, Urteil vom 20. Oktober, 1988- IZR 238/87- Oberlandesgericht Köln. (RAL Archive).

These examples show the ambiguity and the legal difficulties that surrounded the focal value of the eco-label. They make clear that the concept or definition of environmental friendliness was far from clearly defined and was even subject to legal proceedings. The judicial system as another actor and social world took part in the standardisation process of the eco-label by setting out the notion of 'more or less environmental friendliness'. This 'more or less environmental friendliness' presented a shift to a more gradual concept of a categorical concept of clear 'environmental friendliness' as it has been used in the early years of the eco-label.

Changes in the Blue Angel symbol

Not only the concept of being environmentally friendly, but also the sign itself caused major differences of opinions and struggles of definition. The round Blue Angel symbol, which was provided by the United Nations, shows a blue figure with spread arms surrounded by a bay wreath. Until 1998, it held the circular lettering 'environmentally friendly'. Due to the different viewpoints, the serious legal disputes and increasing uncertainty among the general population, it was decided to replace the formulation 'environmentally friendly' with a simple, non-descriptive wording, namely an 'environmental sign' (Neveling, 2000). In addition, the specific aspect of the product's environmental friendliness was added at the bottom edge of the label (e.g. because of low-emission). As Henning Scholtz underlined in the interview, the name environmental sign is the indication that "it is only a form of relative environmental friendliness".53

This change in the name of the eco-label was significant step in the concept of the Blue Angel, since its main characterisation of 'environmental friendliness' was watered down to a less indicative 'environmental sign'. Especially for consumers, who generally do not know the procedures behind the awarding for a product, such a change of the 'title' of the eco-label was very important: as a consequence of the legal clarification processes, an assumption of a product being generally 'environmentally friendly' was no longer indicated. At the same time, this step was also a protectionist and regulatory measure. With the replacement of 'environmentally friendly' with an 'environmental sign', less justification became necessary on the part of the awarding institution. From that point forward, the Blue Angel simply certified a product with and an 'environmental sign' but not with 'environmental friendliness' in particular, as this had been greatly criticised and legally challenged for being a wrong description and a misleading term. This further

⁵³ Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011.

demonstrates that a shift had taken place in the standard of the label from a categorical concept to a rather gradual and less indicative notion of an 'environmental sign'.

Two and a half years ago, the Blue Angel symbol was further divided into four categories: climate protection, water protection, health protection and protection of resources. The aim was to catalogue the system for the consumer and to establish the eco-label more profoundly.

Towards stabilisation and continuity: the turning point in the Blue Angel's history

As was pointed out before, particularly the first years of the Blue Angel were characterised by an ambivalent and troubled history: the German eco-label "went through periods of obstruction, confrontation and serious legal fights" in the 1970s and 80s (Müller, 2005, p. 28). "That is, the Blue Angel programme initially encountered almost unanimous resistance from industrial associations as well as the consumer community" (ibid.). But also within the institutions, problems and conflicts arose from time to time.

However, during the 1990s, a turning point in the history of the Blue Angel can be noted that led to a greater degree of acceptance and a more stable and continuous course of the eco-label. Different factors played a key role in this change of perception and formal stabilisation. One significant reason was the creation of other environmental labels during the late 1980s and early 1990s, such as the Nordic Swan or the European eco-label. "The situation changed completely: Since the 90s. . .sustainable consumption or the change of consumerism and production methods has moved strongly towards a general debate about environmental policy and we have an inflation of labels today" as Edda Müller, 'mother of the Blue Angel' being involved with the eco-label since its foundation, said.⁵⁴

This change towards a debate about environmental protection in general has strengthened and fostered the acceptance of and confidence in the eco-label. Although other eco-labels had been created in different countries, which led to a certain confusion for the consumer, this also showed an increase in the general demand for eco-labels and the apparent functionality of the Blue Angel paving the way for new eco-labels. Consequently, the number of firms using the Blue Angel eco-label rose steadily over the

Prof. Dr. Edda Müller, vice chairwoman of the Environmental Label Jury, telephone interview by the author, 23 May, 2011.

years and the label became more and more popular among the population.⁵⁵ Therefore, since the late 1990s, a relatively stable development of the Blue Angel on a relatively high recognition level took place.

Another aspect of the Blue Angel's increasing acceptance was the fact that industrial associations and also producers themselves became less critical, more willing to innovate and to make use of new production procedures. "Industry has noticed by now that environmental protection is important" and it can be said that the latter plays a more important role than during the early years of the eco-label. The Blue Angel has certainly become a 'trend' throughout the last thirty years amongst the population, which had a significant impact on industry and its organisations. Competition also contributed to an increase in the use of the label as it became a marketing tool and added a 'recognition factor' on the market. In some areas, such as wall paint or glue, "the associations had formerly positioned themselves against this environmental sign. . today, however, one can hardly find any wall paint that is not labelled with the environmental sign". In these cases the Blue Angel certainly served as an impulse or even a form of pressure on other companies. The motivation behind this is that the label wants "to motivate people to produce positive and environmentally friendly products", as Henning Scholtz pointed out. 58

Although struggles with the industry are no longer as prominent as they were in the early years of the Blue Angel, there will always be rejections from some parts of industry or companies. One recent example is the failure of the Blue Angel in the mobile phone industry, which was first possible in 2007. RAL and the other institutes responsible for the Blue Angel wanted to introduce an eco-label for more environmentally friendly mobile phones. In this case, environmentally friendly was meant to signify 'less harmful to the consumer'. It proved to be very difficult to introduce environmental friendliness for mobile phones, which concerns mainly questions of radiation and radiation levels. Since all mobile phones produce radiation, producers did not want to declare better and worse products with the Blue Angel. Only one provider applied the Blue Angel for his cell phone children's edition-today, this company is now out of business due to bankruptcy.⁵⁹ The industry and different producers have successfully prevented the introduction of an environmental sign

⁵⁵ Dr. Hans-Hermann Eggers, UBA, telephone interview by the author, 16 May, 2011.

⁵⁶ Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011.

⁵⁷ See also Kirchhoff & Richter, chapter 6.

⁵⁸ Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011.

⁵⁹ Ibid.

for mobile phones with a concerted effort.⁶⁰ Clearly, companies "do not want this [label] because they do not even want to make the consumer aware of the radiation problem".⁶¹ It becomes obvious that innovation and technology also play a part in the standardisation of environmental friendliness. New products or production techniques, such as mobile phones that did not exist before, shape and extend the course of the Blue Angel and its environmental friendliness.

At the same time, there are new issues and topics that arise and that are considered for labelling. As we have seen, the hold in the ozone-layer was a major issue during the beginnings of the eco-label. In recent years, climate change has become an increasingly prominent topic for eco-label products. Obviously, it could have also been decided upon to create a new, independent system for the protection of the climate. Nevertheless, the Blue Angel was determined by the BMU to be relevant for this area. Therefore, "the discussion about climate is now being done via the Blue Angel and accordingly there are specific products of concern" such as refrigerators or water boilers. As Henning Scholtz said in the interview, the inclusion of climate can be seen as a broadening of the scope of the Blue Angel. As this example shows, new issues and their negotiations can extend the focus of environmental friendliness, if certain decisions are taken by the labelling institutions. The concept of environmental friendliness is thus in a constant state of development, leading to more standardisation.

The maturation of the eco-label

Although there still is, and always will be some reluctance towards the eco-label from some parts of the industry or certain producers, the stabilisation of the Blue Angel system makes such reluctance ever increasingly unsuccessful. At the same time, some industries, such as the tyre industry explicitly decide not to use the Blue Angel, although the criteria for receiving it are fulfilled. The reasons for this are mostly related to marketing or the use of other forms of private eco-labelling schemes (Blauer Engel, 2009).

In comparison to the early years of the Blue Angel, cooperation between different institutions has improved remarkably, as the stakeholders have come to know each other for a longer period and a relationship of mutual trust has developed. Of course, different

⁶⁰ Ibid.; Prof. Dr. Edda Müller, vice chairwoman of the Environmental Label Jury, telephone interview by the author, 23 May, 2011.

⁶¹ Prof. Dr. Edda Müller, vice chairwoman of the Environmental Label Jury, telephone interview by the author, 23 May, 2011.

⁶² Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011.

opinions are still prevalent and must be considered. The goal is not to have the same opinion but to have a common objective. As Henning Scholtz nicely pointed out, "we are in the obligation to the sign". Revertheless, decision making and finding common agreement can be difficult. A recent example concerns the establishment of a Blue Angel for elevators, where negotiations degenerated and had to be postponed because the different producers could not find common ground. This shows that finding consensus between the different parties involved can be demanding.

A further recent example concerns the planned establishment of a Blue Angel for windows in 2009. During this process, it was noticed that various kinds of assessment criteria had to be considered for the different materials that could be used, such as wood, aluminium or plastic. The consultations between RAL and experts about the establishment for a Blue Angel for windows turned out to be "fulminant and hectic" and no result was reached in the end.⁶⁴ The fact that discussions can become hectic is owed to the economic advantage gained with the introduction of a new eco-label for the label holder and a disadvantage for the other producers, which often leads to more competition. In such cases, the task of the president of the Jury is to consult with every participating protagonist, ranging from company representatives to environmental associations and the RAL itself in order to achieve a consensus on a new product label.

A further recurring topic of debate is an eco-label for bicycles. Generally, it has been decided that there will be no environmental label for bicycles, since they are already environmentally friendly per se. When compared to other products in their product category, namely vehicles such as cars, they would therefore always be awarded with an environmental sign. The 'dilemma' of the bicycle seems to be an ever recurring topic in the environmental agency and varying opinions about this issue exist, as Hans-Hermann Eggers explained.⁶⁵ Usually products are compared within their direct product category, which is why I asked two of my interview partners why bicycles are not compared amongst each other. If done in this way, differences in the production processes would be certainly noticeable and one bicycle might be more environmentally friendly in its production than another. Interestingly, both agreed with my opinion and answered that this would be possible and that certain parties have argued in a similar way. Nevertheless the introduction of an eco-label for bicycles did not have any success until now, partly because the department for transportation has been against it.⁶⁶

⁶³ Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011.

⁶⁴ Ibid

⁶⁵ Dr. Hans-Hermann Eggers, UBA, telephone interview by the author, 16 May, 2011.

⁶⁶ Ibid.

This again shows the disparity of the idea of environmental friendliness: although an object is considered environmentally friendly in general terms, it cannot be awarded with the Blue Angel and is excluded from the Blue Angel's definition of environmental friendliness. The fact that this product category was excluded is a result of constant negotiations between different social worlds involved in the Blue Angel scheme. Obviously the outcome of this decision might have been different, as some people were in favour of it. By excluding this product category, environmental friendliness was standardised in a specific way, namely not to include products that are environmentally friendly per se.

These examples have shown how the decisions made by RAL and the other parties involved selectively create and standardise environmental friendliness through their decision making. The question that arises here is whether environmental friendliness can only be awarded to products that are not fully environmentally friendly. As Edda Müller pointed out, environmental friendliness is a "semantic debate": In the early years, "some said we would need to say 'more environmentally friendly' than other products. But at that time, we said that this also does not make sense, since this would mean that everything is environmentally friendly". Can consumption ever be environmentally friendly? This has been a recurring topic in the past years and is still questioned by different environmentalists today. In this regard "consumption can never be environmentally friendly as it always involves the consumption of resources".

Although the criteria for awarding a product as environmentally friendly are of course defined by the actors and institutions involved in the awarding process, an all-embracing definition of the latter still does not exist.⁶⁸ Rather, as Hans-Hermann Eggers said, there are many topics the Blue Angel has to deal with, such as "energy consumption, material properties, pollutant content, exposure to substances, or noise- these are the relevant topics...Then they will be adapted product-specifically".⁶⁹ Thus, environmental friendliness is defined for different topics, which then results in "very distinctive specifications for each product within its product category". Therefore, instead of focusing on an all-inclusive environmental friendliness, only specific aspects of it are considered for each product. Although directions might change and new products might be included, the goal is to support the environment by identifying environmentally friendly products.⁷⁰ As a result,

⁶⁷ Prof. Dr. Edda Müller, vice chairwoman of the Environmental Label Jury, telephone interview by the author, 23 May, 2011.

⁶⁸ Dr. Hans-Hermann Eggers, UBA, telephone interview by the author, 16 May, 2011.

⁶⁹ Ibid.

⁷⁰ Henning Scholtz, RAL, interview by the author, Sankt Augustin, 16 May, 2011.

the standardisation of environmental friendliness is a constant process of discourse and negotiation shaping the course of the eco-label and the awarding criteria for it.

Conclusion

The history of the Blue Angel has shown the ideas behind, and the establishment of this environmental labelling scheme. There has been much hesitation and many doubts about the use and the effectiveness of a national eco-label, and it has taken almost 10 years to solve the issue formally However, the eco-label Blue Angel has proven to be a success and is still significantly represented on the product market today. It not only has a major influence on environmental issues, but also served as a role model for many other eco-labels.

As has become clear in this analysis, environmental friendliness has been standardised by different actors from different social worlds in an ongoing negotiation process. By crossing these different social worlds, the concept of environmental friendliness has been shaped according to standardised criteria established by the interacting stakeholders and technological progress. The eco-label was established by the government and the environmental-labelling institutions. As certification is not based on legal criteria we have seen that the Blue Angel does not always certify the most environmentally friendly products. Lastly, the eco-label served as a soft policy instrument for the sake of environmental protection. It has to be noted that this paper addressed only a very specific aspect of the Blue Angel, namely the creation of environmental friendliness without taking into account all existing historical aspects, which would exceed the focus and capabilities of this paper. Therefore, only very precise and representative examples have been analysed in order to trace the creation of environmental friendliness as the focal value of the Blue Angel.

Agreeing with the definition of standards given by Bowker & Star (2000), I want to add that standards of environmental friendliness in this labelling scheme are a process of constant change and development. During this process, four major dimensions have played an important role in the operability and the standardisation of environmental soundness: disagreement and conflict of opinion (1), legal issues (2), innovation and new technologies (3) and the occurrence of new environmental issues or concerns (4).

From the beginning, the history of the Blue Angel has been characterised by major struggles, inner and outer conflicts as well as widely differing opinions. Due to all the different parties involved, it has been difficult to find common ground. Not only the question of how to establish an eco-label, but also the very idea of the creation of a label was disputed. Particularly industry has been either reluctant or totally against the

creation of an eco-label, which resulted in major disagreements and conflicts of opinion (1) between the aforementioned and the government as well as the establishing institutions respectively. As has become clear in this analysis, conflicts with industry were not the only difficulty the label had to face; cooperation between the institutions was difficult from time to time as well.

Another dimension was the *legal obligations and issues (2)* involved in the creation of an eco-label. An important point was the question of whether to establish a quality seal or an environmental label. Later in the history of the Blue Angel, legal proceedings and court decisions centred around the question as to how to define and where to set the actual level of environmental friendliness as the latter was not clearly defined and often understood in various subjective ways. By creating a common definition of more or less environmental friendliness, a more gradual standardisation and the eventual acceptance of the label took place.

Innovation and technology (3) also played an important role in establishing the label as in the case of aerosol cans. New production technologies provided for the development of new and wholly environmentally friendly products leading to the disappearance of the Blue Angel for this product category altogether. At the same time, the focus of environmental friendliness had to be broadened due to the increase in new technologies and products. As the example of mobile phones has shown, heretofore nonexistent products arrive on the market as technology advances. Consequently, new criteria must be established. Although the introduction of an eco-label might be desirable and helpful, it is often neither desired nor feasible. In this regard, companies, industry or the government shape the focus of the environmental label by preventing its introduction for a specific product, such as bicycles.

As a last point, new environmental issues and concerns (4) also influence the course of the eco-label and the standards of environmental friendliness. Whereas ozone levels were such a concern in the early years, lately, the climate has become hotly debated topic amongst the population and in politics, leading to the introduction of the Blue Angel in new product categories, such as water boilers, thereby broadening its scope.

To conclude, in the course of the label's history, a standardised concept of environmental friendliness has been established, namely that in each product category new criteria are being defined to distinguish particular environmentally friendly products from less environmentally friendly products. The example of the focal value of environmental friendliness has shown very well how a term or an idea can be socially constructed. It is this focal value that is inevitably and automatically associated with an awarded product. Although this focal value might be interpreted differently, it serves as the main feature and recognition value of a specific product.

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