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Governing Consumer Information in the Digital Age: Lessons from a Controversy Between a Food Rating App and Processed Meat Manufacturers

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Abstract: This article examines the legal response to a controversy on dietary information in the context of commercial court and appellate court rulings. Against a backdrop of health and environmental crises, the construction of information on such risks has become a sensitive issue for market actors, as a result of which courts are asked to arbitrate conflicts. This is particularly important at a time when informational mediations carried out by new actors increasingly take the form of digital ratings and augmented information. The dispute involving the firm Yuca and the French agro-industrial processed meat sector is a case in point. This paper analyses the structural arguments put forward in this legal dispute at the first instance and appeal stages. In the light of law and socio-economics, it untangles questions pertaining to the link between denigration and freedom of expression and the definition of the role of scientific research and consensus in the decisions. This leads us to shed light on the contents of the changing missions of two central types of actors: the mediators who monitor and regulate market practices and the judges that arbitrate these mediations and settle controversies.

Keywords: courts; Yuka; informational mediation; digital app; freedom of expression; denigration

1 Introduction

The Yuka app, launched in January 2017, was developed by Yuca, a simplified jointstock company founded a year earlier. Based on a breakdown of the composition of products that is summarized in a rating, the app formulates recommendations on 6

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food items and/or proposes alternative products.¹ When additives are present, the user can click the link "More info on the additives" and access the list of additives, their purposes, and a colour-coded classification that reflects a level of risk that is specified by an additional information sheet (linking to scientific sources). The presence or absence of additives accounts for 30% of the weighing used to determine the product's rating (with nutritional quality accounting for 60%, based on the Nutri-Score method), meaning that it has a manifest effect. When the product contains a hazardous additive, its rating is capped at 49/100, meaning that the criterion's impact exceeds 30 %. The negative impact is particularly significant for prepared meat products, which are generally enhanced with the nitrites or nitrates E249, E250, E251, and E252 (respectively: potassium nitrite, sodium nitrite, potassium nitrite, sodium nitrite). In November 2019, a link offering to sign a "Petition on banning nitrites – Additives that increase the risks of colorectal and stomach cancer" launched jointly with the Foodwatch advocacy group and the French League against Cancer (garnering over 320,000 signatures) was added to product pages. Summoned to appear before three commercial courts by the Federation of French charcuterie companies (FICT),² Yuca was sentenced on three occasions: On 24 September 2021 by the Brive-la-Gaillarde Commercial Court, following an application by the charcuterie company Le Mont de la Coste, based in nearby Ussel; on 13 September 2021 by the Aix-en-Provence Commercial Court to the benefit of cooked ham producer ABC Industrie, based in Peyrolles-en-Provence; and earlier on 25 May 2021 by the Paris Commercial Court on the same grounds of denigration and deceptive marketing practice³ to the benefit of the FICT (of which the two aforementioned companies are members). However, these

¹ The app uses the phone's camera to scan the barcode on the product's packaging. This activates a link to a product sheet with a rating that uses a colour code, an adjective and a mark out of 100: Green for "Excellent" and "Good" (50–100); orange for "Poor" (25–50); red for "Bad" (under 25). Below the rating, the sheet includes details on the composition of the product (protein, fibre, saturates, salt, additives, etc.), complete with quantities per 100 g of product, also colour-coded and with recommendations of better-rated products.

² The FICT says that it represents 300 French companies in the sector, including 52 % of those with fewer than 50 workers. It is registered in the French High Authority for Transparency's directory of interest representatives. It has published two actions, respectively entitled Promoting the application of European nitrite regulation while avoiding scientifically unfounded national measures (20 October 2020) and Demonstrating that the bill aimed at banning nitrated additives in processed meats is not justified by any official scientific expertise (24 March 2022).

³ Commercial Court of Paris (France), 25 May 2021, n° 2021001119, *FICT et SAS Yuca*, 20,000 euros in damages + 10,000 euros for costs and expenses. Commercial Court of Aix-en-Provence (France), 13 September 2021, n° 2021004507, *ABC*, 25,000 euros in fines (564,000 euros asked by ABC). Commercial Court of Brive-la-Gaillarde, *Le Mont de la Coste*, 24 September 2021, n° 2021F00036, 30,000 euros (vs. 600,000 euros asked).

rulings were overturned on appeal, in verdicts rendered between 8 December 2022 and 7 June 2023.⁴

These decisions are analyzed in terms of the specificities of the parties involved, who judge and who are judged, as well as the purpose of the decisions. As far as the judging actor is concerned, the French commercial courts have been mandated by the State to settle disputes between merchants. At the time of joint regulation, polvnormativity is notable, with conflicts of norms where the law leaves in the hands of the judge a significant power of appreciation of commercial controversies. As for the actor whose action is judged. Yuca belongs to the category of "positive pragmatism entrepreneurs" (Beuscart, Peugeot, and Pharabod 2020), who adopt the entrepreneurial form to respond to a social challenge (the food transition). These hybrid actors combine the status of a private company with discourses of general interest and governance of conduct. In terms of context, the arguments reflect the complexity of ruling on food products associated with controversial additives and contested markets (when the marketing of these goods raises controversies) (Steiner and Trespeuch 2015), or at least a "concerned market" (Geiger et al. 2014), which generates fears and tensions among its stakeholders, especially considering that risk communication is "sensitive communication" (Libaert and Allard-Huver 2014). We therefore immediately understand the interest of reporting on the uncertain face-off between an institution of "joint regulation" whose limits have been studied (Lazega and Mounier 2009), a society whose boundaries between economic rationality and commitment are complex, all this in a context of tense markets.

Drawing on the combined expertise of a legal scholar in fundamental rights and of a sociologist researching the uses of digital technology, this paper presents a comparative study of six judgments (three at first instance and three on appeal) and of the literature to propose a critical analysis of the arguments put forward during the ruling process. By analysing these rulings in their political and socio-economic dimensions, we will shed light on the remarkable gulf between the stances of the judges at first instance and on appeal. Scholars in law have so far mostly researched the issues of data protection and privacy, in particular concerning mobile health apps (Gnadinger 2014; Muchagata and Ferreira 2019; Tabusca et al. 2018). Research offers a critical analysis of private and public regulation, usually concluding that a more users-approach needs to be considered (Magrabi et al. 2019). Yet, previous scholars have not covered case-law as judicial cases are new in this field, apps being new technologies.

⁴ Appeal Court of Aix-en-Provence, n°2022/354, judgment, 8 December 2022; Appeal Court of Limoges, n°120, judgment, 13th April 2023, Appeal Court of Paris, n°21/11775, judgment, 7 June 2023. The Paris Appellate Court sentenced the FICT to pay the costs incurred at first instance and on appeal and to pay Yuca 60,000 euros on the grounds of Article 700 of the Civil Procedure Code; the Aix-en-Provence Appellate Court sentenced ABC to pay Yuca 20,000 euros on the same grounds; likewise the Limoges Appellate Court sentenced Le Mont de la Coste to pay Yuca 20,000 euros.

Our original approach is to explore how judges interpret social use of food mobile apps and how this interpretation is inherited from a conceptual framework that oscillates between industrial regulation (with the domination of economic players) and state regulation with a human rights-based approach. A more dominant literature since the beginning of the 21st century has denounced Human rights as a tool for achieving globalizing neoliberal democracy (Hopgood 2013). O'Connell argues that "all human rights advocates are faced with a choice (not an easy choice, but a necessary one) between acquiescence in a process which is inherently inimical to the protection of human rights, or utilising human rights to challenge and overcome the dominant model of globalisation" (O'Connell 2007, p. 483). We plan to better understand the dominant story of private law (as enacted by industrials and internalised by capitalist societies) and its role in the subordination of consumers. This article also ambitions to enrich the critical approach to legal consciousness research (Halliday 2019). Judges here play the role of arbitrator due to the tension between economic freedoms and Human rights either in favour of empowering consumers (and eaters) in a risk society (with their potential status of consumer-victims), either according to the dominant line of economic freedom. The purpose is to describe the changing roles assigned by judges to the three main actors involved in the controversy: the Yuca company as a player in the "transition techs", the research carried out into the dangerousness of nitrites as a scientific guarantee, and consumers as the recipients of prescriptive information.

We begin by explaining the context (2) in which this litigation emerged: the governance of risk and a long-standing concern about the dangers of nitrites and digital devices a tool for governing practices that are increasingly integrated into consumer practices. We then recall (3) how European consumer protection law has always emphasized the central role of an informed consumer. The issue of consumer information is precisely disrupted by the emergence of digital operators (4) who claim to be serving better citizen information during the purchasing process. The judicial decisions analyzed in this study help to clarify the obligations weighing on these new actors (5) and the science that can be mobilized (6). We will conclude (7) with the major contributions of these cases, ending with the current concern of public authorities to regulate these digital operators, whose role in information has ultimately been recognized by the French judge.

2 The Context

2.1 Risk Governance

The history of health and environmental crises has consistently evidenced a salient phenomenon: "A lack of information on the risks involved, either because it was not

gathered by the people in charge or the public authorities, or because it was concealed or downplayed, thus impacting in one way or another decisions, which, had they been better-informed or made earlier, could have prevented or at least limited damages to the environment or at least to the health of exposed persons" (Berger 2020, pp. 2–3).

There are multiple reasons for such negligence: Intentional lack of knowledge or disregard (the making of neglect) or more unconscious forms such as "undone science" (Frickel et al. 2010), favoured sciences (Jouzel and Prete 2017), or systemic collective denial (Dedieu 2022). The actors and activities involved in this can be usefully studied from the angle of the construction of health and environmental communication, as information conveyed through various means is credited with the benefit of offering "the public an ability to adapt its individual behaviours" (Berger 2020, p. 3). The deployment and action of devices contribute to promote reference systems for presenting, representing and qualifying quality (Barrey, Cochoy, and Dubuisson-Quellier 2000; Cochoy 2002; Laurent and Mallard 2020). They help to define a prior agreement on quality standards for goods (Musselin et al. 2002), and reduce uncertainty about product quality (Karpik 2007). They act as facilitators between producers and consumers. The implications of the circulation and retention of information pertaining to new risks and of its translation to consumers by forprofit digital actors are major. Digital operators, exemplified here by the company Yuca and its Yuka app, are new actors on the market of consumer information and influence alongside consumers' groups (Guinchard and Bazin-Beust 2011, §5) and, more recently, social media influencers (Hazan and Loinger-Benamran 2021, 10–11). All of these actors credit and discredit products and services and in doing so inform consumers' choices. Yuca claims to operate in the name of freedom of expression, which cannot be boundless, and is an area where "it remains difficult to draw the line" (Depincé 2022, p. 36).

Our conceptual framework builds upon previous literature on the theory of risk governance. Previous academics (either in law, political science and sociology) have denounced the phenomenon of state deregulation in chemical products. In her monography, Noiville (2003) concludes that risks governance requires reinforcing the role played by the State. In the same vein, Vauchez believes that there exists a need to reinvest the State with "public" affairs (2022) and Boullier (2019) makes the argument that the existing regulation of chemicals suffers from the domination of industrial actors in their enactment. This study illustrates this reflection by questioning the respective roles played by the Industry, consumers and the State. Consequently, the disclosure of information relating to industrial manufacturing data or technological innovations is still seen as an infringement of business secrecy and economic freedom. The information disclosed is therefore only permitted on the basis of the negative externalities that the new technologies would generate, even though freedom of expression would provide a broader basis. Moreover, this work is in line with the thinking in the information sciences, where the private regulation of new technologies (lex Informatica) has escaped state control.

2.2 Nitrites in the Public Arena

Historically, the risks posed by the use of nitrites in processed meats have been the subject of extensive studies and debates by policy-makers. The use of sodium nitrite was authorized in cured meats in the United States in 19 October 1925; European manufacturers claimed this put their products at a competitive disadvantage.⁵ In 1934, it was German's turn to authorize the additive. In 1935, the French High Council for Public Hygiene (CSHPF) tasked toxicologist Frédéric Bordas with conducting a study on nitrites. The study found that the presence of additives was in the economic interest of producers to the detriment of public health (Coudray 2017). The use of nitrites remained prohibited in France until 1964,⁶ the year when the Academy of Medicine, upon request from the Ministry of Agriculture, "allowed it only reluctantly" (Coudray 2017). On the TV show Magazine de la consommation (TF1) that aired on 26 April 1979, the general public heard the concerns of cancerologist Léon Schwartzenberg regarding the link between nitrites and cancers, especially stomach cancer.⁷ In a dispute between Denmark and the CJEU, which, due to the stricter regulation of nitrites, invoked a derogation to Directive 95/2 on food additives, the CIEU admitted (para.29) their carcinogenic character,⁸ citing the conclusions of an opinion issued by the Scientific Committee on Food (SCF) on 22 September 1995.⁹ Five

⁵ Reasons pertained to the shorter drying time, longer preservation, and organoleptic quality of the products (in this case, colour or flavour).

⁶ Decree of 15 September 1964 (JOFR, 3 October 1964, 8923). On the same day, a decree removed nitrite salt from the category C of poisonous substances (JORF, 3 October 1964, 8924). A decree issued on 8 December 1964 established that: "On an exceptional basis, it is allowed: 1° To use, for the preparation of cured meats, processed meat products and preserved meats, with the exception of products sold as fresh meat, hash and fresh meat products, salt with a maximum of 10 p. 100 of sodium nitrate or pure potassium nitrite or nitrite salt compliant with the requirements established by the 15 September1964 decree; the sodium nitrite levels of such prepared foodstuffs must not exceed 0.150 g per kilogram" (JORF, 5 January 1965).

⁷ https://www.ina.fr/ina-eclaire-actu/nitrites-charcuterie-cancer.

⁸ CJEU, *Denmark v/Commission*, C/3.00, 20 March 2003, §31. The European Commission argued that these derogations "are aimed at protecting public health, [but] they are excessive in relation to this aim" (§22).

⁹ SCF, Opinion expressed on 22 September 1995 (Reports of the SCF, thirty-eighth series), p. 1, stating that "nitrosamines are carcinogens [and that] it is impossible to determine a level below which they pose no carcinogenic risk".

years later, the IARC classified nitrites as probably carcinogenic to humans (Group 2A); in 2015, processed meet was classified in Group 1 (carcinogenic to humans: known cases of stomach and colorectal cancer). Since the first instance rulings, a report by the ANSES found a positive association between colorectal cancer and exposure to nitrates or nitrites through meat products in July 2022.¹⁰ While examination of the appellate rulings suggests that this was not a central reason for the U-turn, the report may have contributed to an extent that is impossible to assess.

The media, for their part, "widely reported on this classification and some scientists spoke up against nitrite salt. The broadcast of prime-time reports, including one in 'Cash investigation' in September 2016, gave this phenomenon increased momentum. Consumer advocacy groups such as UFC–Que Choisir urged consumers to avoid food products containing this preservative and called for special vigilance concerning the consumption of these products by children, who are highly exposed to processed meat products".¹¹

The debate has also entered the political arena at least since 14 December 2020, when a bill to gradually ban additives in processed meat products was submitted. In 2018, the European Commission approved the more cautious Danish position on nitrite salts, providing for consumer-friendly derogations. A fact-finding mission set up at the National Assembly yielded a report on nitrite salts in the food industry, stating, in support of the IARC classification, that "there is a scientific consensus on the link between processed meat consumption and cancer" (Ibidem, p. 43). The report proposed a total ban on nitrite salts, phased out between January 2023 and January 2025 (Ibidem, p. 82). The Aix-en-Provence Appellate Court remarked upon "the reality of this public debate", citing the "3 February 2022 bill aiming to ban these additives" and the fact-finding report submitted to the National Assembly in January 2021.

3 Freedom of Expression and the Right to Consumer Information

3.1 The Right to Consumer Information: A Core Risk Prevention Measure

The freedom of information described in Article 11 of the French Declaration of the Rights of Man and of the Citizen as "one of the most precious rights of man (...)" and laid

¹⁰ ANSES, Evaluation des risques liés à la consommation de nitrates et nitrites, Avis révisé de l'ANSES, Rapport d'expertise collective, July 2022.

¹¹ National Assembly, Richard Ramos, Barbara Bessot-Ballot and Michèle Crouzet, Information Report on nitrite salts in the food industry, n°3731, 13 January 2021, n°3731, 67.

out in Article 10 of the ECHR is fundamental for consumers¹² and applies to online and offline materials equally.¹³ According to the European Court of Human Rights (ECtHR), this liberty "is applicable not only to 'information' or 'ideas' that are favourably received or regarded as inoffensive or as a matter of indifference, but also to those that offend, shock or disturb. Such are the demands of pluralism, tolerance and broadmindedness without which there is no democratic society".¹⁴ Additionally, "in a sphere in which it is unlikely that any certainty exists, it would be particularly unreasonable to restrict freedom of expression only to generally accepted ideas"; "Article 10 requires a high level of protection of the right to freedom of expression" in a case where "the applicant's remarks concerned issues of general concern, namely, protection of the environment and public health".¹⁵ Lastly, according to the same Court, media outlets, NGOs, like researchers, bloggers and popular social media users,¹⁶ are entitled to special protection because of their key role as "public watchdogs" (or "mediators of surveillance"). As the ECtHR is convinced that freedom of expression is a key maker of democratic societies, a progressive interpretation of Article 10 ECHR has always been favoured.

Furthermore, consumer information has been a pillar of European public policies since the 1950s, consistent with an approach that supports industrialists' liberties and a self-regulated market. Most importantly, the state displays inhibition in the face of the industry, which consumer information is meant to make up for. On nitrites, for instance, in 2020, Mr Ramos made an aborted attempt to introduce a 0.10 cent/kg tax on processed meat products containing nitrated additives for the benefit of the national health insurance fund. Then Minister of Health Agnès Buzyn opposed the proposal, citing insufficient scientific knowledge.¹⁷

The importance of this right to information is heightened at a time of risk governance, when abstention is not an option and "in many cases, demands of evidence of harmlessness come up against a scientific impossibility" (Thomasset 2006, p. 80). While policymakers have long managed health risks, Jean-Baptiste Fressoz has shown that, with the development of the industrial society, we have shifted from empirical, a

¹² Paris Appeal Court, (France), 20 December 1974: *"Guide des médicaments les plus courants"* case, in which the judge denied the request to withdraw certain passages.

¹³ See in particular, Council of the European Union: EU Human Rights Guidelines on Freedom of Expression: Online and Offline, 12 May 2014.

¹⁴ ECtHR, *Hertel v. Switzerland*, Application no. 25181/94, 25 August 1998, para. 50, on research regarding the harmful effects on human health of the consumption of food prepared in microwave ovens.

¹⁵ ECtHR, Mamère v. France, Application no. 12697/03, 7 November 2006, para.20.

¹⁶ ECtHR, Magyar Helsinki Bizottság v. Hungary, Application no 18030/11, 8 November 2016.

¹⁷ National Assembly, Richard Ramos, Barbara Bessot-Ballot & Michèle Crouzet, Information Report on nitrite salts in the food industry, n°3731, 13 January 2021, n°3731, 41. Three members of Parliament launched a fact-finding mission designed to reflect on a "regulatory evolution towards banning these additives or drastically reducing their quantities".

posteriori damage assessment, using legal bodies, to *a priori* evaluation based on forecasting and relying on scientific experts (Fressoz 2012). In that context, information is clearly among the prevention measures to put in place. In this "current shift from accountability to prevention" (Thomasset 2006, p. 81), supporting the emancipation of information becomes even more valuable. Risk (as opposed to mere danger), characterized by predictability, and an uncertain, known or proven character, must be freely accepted by an informed consumer (Ibidem, p. 80). Rallying citizens to risk governance and to the idea of co-responsibility¹⁸ requires informing them in a way that allows for the adoption of individual prevention measures, as each individual knows their degree of vulnerability and is ready to accept or more or less high risk level, which applies to likely and certain risks: "Incentivizing individuals to lower their exposure to risks entails that they are informed of said risks".¹⁹ As the French Council of State clearly put it, "knowledge of the risk and the fact that it has been chosen and not suffered are key factors of acceptability for the relevant publics" (Thomasset 2006, p. 88).

3.2 Reinforcing the Right to Information and Freedom of Expression in Private Relations against an Extensive Definition of Denigration

In neoliberal western societies, there is a consensus among legal scholars about the "over-protection of business" (Bigot 2019, p. 76) resulting from the very broad, allencompassing definition of denigration based on which French commercial courts operate, to the detriment of free criticism (Honorat 2021). Historically, in France, according to the principle of the economic neutrality of the state, denigration law is about making sure that the state does not distort the conditions of free competition unless the existence of a public or general interest can be argued. The fight against unfair competition has been the subject of multiple international texts whose definitions are somewhat restrictive²⁰ but potentially extensible. If intent to harm is not

¹⁸ "Information pertains to the right of individuals not to be put in a dangerous situation, known to a third party, without any possible defence or resistance on their part. The dissemination of better information on risks is also a necessity for citizens to become co-responsible of a risk that they would no longer suffer but accept and choose" (Ibidem, 81).

¹⁹ Conseil d'État, *La prise en compte du risque dans la décision publique, Pour une action publique plus audacieuse,* La Documentation française, 2018, 334.

²⁰ Art. 10 bis added to the Paris Convention for the Protection of Industrial Property at the Hague Conference of 1925, defining unfair competition (par. 2) as "any act of competition contrary to honest practices in industrial or commercial matters", two cases of which are singled out, including "false allegations in the course of trade of such a nature as to discredit the establishment, the goods, or the industrial or commercial activities, of a competitor". A third example of unfair competition was introduced at the 1958 Lisbon Conference, pertaining to "indications or allegations the use of which in

alleged, "false allegations" may apply; however, in a 1969 application guide, a double extension is provided for, to "discrediting allegations which are not strictly untrue" and through each state's free interpretation of what constitutes "competition" (Bodenhausen 1969, pp. 150–151).

There are indeed wide disparities between conceptions of unfair conception in Europe (its scope is very limited in the UK, for instance), and the role of consumer protection is even more disputed (Hilty and Henning-Bodewig 2007, V). In France, where the definition of unfair competition is based on case law, an extensive interpretation is favoured, consisting in "undermining a company or a given identifiable product's brand image in order to turn customers away by using reprehensible words or arguments, whether their basis is accurate or not, spread or uttered at any case in a way that the customers of the company in question are targeted, regardless of whether or not it is a competitor of the person uttering these words".²¹ The Court of Cassation uses an even broader definition of denigration as "information that is liable to discredit a product or service", ²² – the terms "discredit" and "information" being, to say the least, extensible (Bigot 2019, p. 74). This sprawling approach is perceptible at multiple levels: Denigration is applied to ever more numerous situations and the causal link between the offence and the economic loss is assessed very flexibly. This enshrinement of denigration (and by extension of industrialists) has even resulted in cases being treated as denigration even when the product in question failed to comply with regulatory levels.²³

Thus, the right to consumer information, considered as a fourth generation right and one of the "intrasocial fundamental rights" (to borrow a phrase by Teubner & Hensel), should enable civil society (including digital actors operating as mediators of the right to information) "to play its role as a countervailing power" (Perroud 2022, §1). Echoing Teubner's work, Thomas Perroud calls for the constitutionalization of horizontal fundamental rights: "I am thinking in particular of the right to consumer information, which, as a fundamental right, would be enforceable against private companies when their action has an impact on health or the environment and which could go so far as to demand scientific evaluation of the harmlessness of certain products" (Idem, §1). This is informed by Teubner & Hensel's argument that the current system of fundamental rights is "unsuited to addressing the violence exerted by social groups against others" and critique of the "state-centric approach of the horizontal effect of fundamental rights"

the course of trade is liable to mislead the public as to the nature, the manufacturing process, the characteristics, the suitability for their purpose, or the quantity, of the goods", targeting industrial indications.

²¹ Versailles Appeal Court, (France), 9 September 1999.

²² Court of Cassation, (France), 11 July 2018, nº 17-21.457.

²³ Rennes Appeal Court, (France), 29 September 2009, nº 08/07086.

(Teubner 2016a, 2016b). In fact, Human rights were historically thought to protect individuals against States only. Perroud accordingly believes that "constitutionalizing a right to consumer information as a horizontal right would in my view have a worthwhile leverage effect allowing, first, civil society to take the place of an increasingly failing bureaucracy, for lack of resources, and second, to have the transparency of information prevail in areas closely related to health and the environment" (Idem, §28). Perroud argues that these horizontal rights should be recognized "so that they play a role of regulation of unequal private relations" (Idem, §26). He shares the view that empowering citizens (with access to information) should counterbalance the deregulation of neoliberal states, which transfers the final choice and responsibility to consumers.

Thus, the right to information appears to form the last line of defence in a period of challenging risk governance, when the implementation of the principles of prevention and precaution by the state has become impossible. Are digital operators appropriate to play such a role?

4 Digital Apps Helping Consumers to Be Better Informed

Digital technologies can be used by "market professionals" (Cochoy and Dubuisson-Quellier 2000) for the purpose of increasing transparency and empowering consumers but also to obscure industry. The Yuca's role can be seen as that "mediator of surveillance" (Latour 2006), is essential, particularly regarding "the surveillance of health and environmental risks" (Prete 2008). Sociologists of translation have proposed the concept of "mediator" to "refer to those who link together the different social worlds" (Ibidem) and contribute to a better dissemination of information. These intermediary actors of health risks are entrusted with a mission from public authorities (Borraz 2005) that has a crucial role in the health and environmental fields.²⁴ According to Teubner, these actors operate as "social counterforces" (2016), and their action requires a reinforcement of "intrasocial fundamental rights".

Studies have so far described the co-construction of a new consumer by marketing discourses (Cova and Cova 2009), which spring up the fictitious figure of a sustainable consumer (Beuscart, Peugeot, and Pharabod 2020). With the advent of digital equipment, the digital transition and the food transition are being considered in tandem, with a "consumer actor" at the heart of market regulation. The idea is that the consumer and the device they use to make their choices form a unique entity. However, the characterization of Yuca's activities is a prerequisite to the designation of the legal regime applicable to the company.

²⁴ Court of Cassation, com. (France), 4 March 2020, n°18–15651.

The courts of first instance proved to be quite suspicious of this kind of system as a tool for accessing information of general interest (Paris Court). Due to the circumstances of the communication (occurring at the very time of the purchase), the app purportedly creates a "manifest imbalance between freedom of expression on the one hand and freedom to exercise an activity on the other, to the latter's detriment" (Saint-Jalmes 2021, p. 40). The app "connects with the consumer at the time of purchase and, pursuing immediate results, precludes any opportunity for open debate, which is a key element of a debate of general interest" (Idem). The local court judges ultimately put forward a narrow interpretation of freedom of criticism (Idem).

Appellate judges proposed very different arguments. The Aix-en-Provence Appellate Court argues that even when commercial goals are involved, this information activity is covered by Article 10 of the ECHR, Article 11 of the 1789 Declaration enshrined in the preamble of the Constitution and Article 11 of the EU Charter and Fundamental Rights, citing this as a "general principle of law". Likewise, the Limoges Appellate Court argued that Yuca has "a mission to inform consumers", combined with a mission of advocacy "for organic, healthy and natural food, in particular with fewer additives". since it issues "opinions". Citing the ECtHR case Mamère v. France, the Court pointed out that freedom of expression, although not being absolute, "is a fundamental freedom that can only be very restrictively limited" and that "the freedom of expression of the Yuca firm is the corollary of the consumers' right to be informed on the health effects of their eating habits." The Paris Appellate Court goes even further by considering that mobile apps help to regulate industrial activities in neoliberal times of state deregulation: "this mobile app has the purpose of helping consumers make the best choices for their health and of serving as a lever for action to lead industrialists to offer better products, in order to reduce health inequalities". For the Aix-en-Provence Appellate Court, the Yuka app is "also a tool to allow the consumer to intervene so that industrialists improve the quality of the products on offer". This affirmation of the virtuous role played by such apps is clearly put forward by Yuca's website. Actually, Yuca developed the Yuka app, which like other information and/or rating apps, contributes to "governing conducts" (Dubuisson-Quellier 2016), meaning that it steers the choices of consumers and producers towards the adoption of more virtuous practices in terms of general interest, in order to address a public problem by regulating the markets (Aykut and Dahan 2015).

In addition to the information tool, activist action is certainly protected under freedom of expression. Aware of the role of rating systems in the regulation of consumers' (and indirectly producers') behaviours and reasonably confident as to the scientific basis at its disposal, Yuca allowed itself to sound the alert on nitrites in processed meats and include a link to the petition aimed at banning nitrite additives. At first instance, the court found that if the petition in itself was protected by the right to freedom of expression, its inclusion in the app "however, leads to consequences that are unrelated to freedom of expression, i.e., a direct and immediate impact on

the act of purchase which seriously harms the freedom to exercise a licit economic activity" (Brive court) and ordered Yuca to remove it. This expressly reflects a neoliberal approach to human rights by the courts. Above all, this approach may seem to be in contradiction with the very principle of digital technologies, which is to provide consumers with information capable of cognitively relieving them. In fact, the joint petition (submitted by Yuca, Foodwatch and the League Against Cancer) reflects a partnership opportunity, one of the objectives of which may have been to legitimate Yuca's activity through a transfer of trust. The building of partnerships may act as a source of reassurance and of reinforced trust that inform commercial relations.²⁵ The appellate judges did not find fault with the link to the petition; the Limoges Appellate Court gives it the advantage of potentially "pressur[ing] public authorities". Mobile apps thus fill a gap in terms of risk regulation by both private and public players.

The appellate judges, by putting the focus on the consumer that receives the information delivered by Yuca, also reframed the implications of the activity of a digital app by bypassing the confrontation between industrialists and digital operators. Judges dismissed the request by Yuca's lawyers of a re-characterization as defamation, which would have made it possible to conclude that the statute of limitations for the case had expired per the law of 29 July 1881. This request for recharacterization was denied in all three rulings on the grounds that the allegations made in the Yuka app pertained to a product rather than to its manufacturer. Thus, it was considered that while pursuing commercial activities, Yuca fulfils a purpose of consumer information and on this basis, should only be subject to some obligations.

5 Obligations Imposed on Digital Operators

5.1 The Obligation of Transparency for the Rating System

In the three rulings, Yuca is characterized as a professional acting in a commercial capacity, meaning that the courts are tasked with examining whether Yuca, as the industrialists claimed, is guilty of denigration and of unfair and/or deceptive business practices.

One of the main implications of the case was whether Yuka's rating system could be challenged legally. The principled position adopted on appeal is quite clear. According to the Limoges Appellate Court, Yuca's only obligation is to provide a transparent account of the rating system it has picked; it has a discretionary power concerning the

²⁵ Beyond the dimension of activism, Yuca has an interest in associating itself with actors that enjoy a degree of trust among consumers. In that sense, the petition is a trust-building device.

choices made for the evaluation of products. This means that even if discredit is established (the presence of nitrites results in a very low grade for the product scanned by the consumer), it does not constitute denigration; even if the term "hazardous" and the mention of the presence of genotoxic and carcinogenic agents "can be scientifically challenged, particularly by considering the doses of additives used, the actual consumption of the product or any other scientific data, they cannot be considered as excessive and even less false", according to the Aix-en-Provence Appellate Court. The digital operator is free to determine its rating system on the condition that it is transparent about it and complies with the obligation of professional diligence.

5.2 The Obligation of Professional Diligence

Due to its activities, Yuca could be accused of deceptive commercial practice, as defined by Article L.121–2 of the French Consumer Code in "allegations, indications or presentations that are false or misleading" regarding the core features of the good and service.

First, as noted by the Limoges Appellate Court, "being able to consume a food item without incurring a health risk is an essential quality of this product", so that this provision is applicable. Unlike in the first instance rulings, the appellate judges dismissed the previously applied criterion of "moderate criticism". For this Court, "distinctive criteria rest exclusively on the falsity of the information or its misleading quality for the consumer". Likewise, according to the Aix-en-Provence Appellate Court, despite "the anxiety-inducing character of this information noted by the first judges and the non-exhaustive character of the scientific documentation presented on the app", the commercial practice cannot be considered deceptive.

The industrialist also alleged that Yuca resorted to unfair commercial practices. According to Article L. 121–1 of the Consumer Code, a commercial practice is unfair "when it is contrary to the requirements of professional diligence and it alters or is liable to substantially alter the economic behaviour of the normally informed and reasonably attentive and educated consumer towards a good or service". While the first condition is met (polls have reported that a very large proportion of consumers who scan products put the product down when it has a bad rating), the second cumulative condition is not established.

Directive 2005/29/EC of 11 May 2005 defines professional diligence as "the standard of special skill and care which a trader may reasonably be expected to exercise (...)". The FICT invoked lack of professional diligence in part on the grounds that Yuca has no scientists in its team. Regarding that particular point, the Paris Appellate Court rejected the argument stating that "the Yuka app, which provides a consumer information service, does not claim to exercise its own scientific authority (...)" adding that the items listed are "numerous and the result of undeniable research efforts pursued for over fifteen years by serious and reputable associations and research institutes; even if they can be challenged, they constitute a sufficient factual basis (...)". What accordingly matters is that Yuca bases its app and rating system on robust scientific knowledge, which does not require in-house scientists. We will come back to this question of the science to be mobilized in a later section.

5.3 The Absence of Additional Obligations

There is also a considerable gap between first instance and appeal judgments in this area.

The appellate judges held that Yuca had no obligation to mention compliance with regulatory thresholds. The first instance judges thought quite differently. The Paris Commercial Court cited this as a reason for dismissing the factual basis as insufficient; as a result, the assessment by Yuca was not interpreted as moderate enough. The Aixen-Provence Court argued that failing to mention these standards and compliance with these standards was enough in itself to expose Yuca to accusations of unmoderated criticism. This puts limitations on free criticism.²⁶ Yuca did not allege a failure to comply with European regulation or deny the role of conservation played by nitrites in processed meats, so these arguments cannot be brought up as evidence of noncompliance with the obligation of professional diligence. Indeed, even when regulatory thresholds are complied with, the risk is recognized in studies by such institutions as the International Agency for Research on Cancer (IARC), the European Food Safety Authority (EFSEA), and the French Agency for Food, Environmental and Occupational Health & Safety (ANSES). Here appellate judges departed from a purely legalist approach, being aware that compliance with thresholds no longer offers sufficient protection to consumers.

Lastly, it was found that Yuca does not have to offer a right to reply to industrialists. In that respect the courts clearly deemed that the app's purpose is to inform consumers at the time of purchase. No right to reply for industrialists was required on appeal, as only consumers need protection. This argument echoes previous remarks noting that appellate judges proved more sensitive to the fundamental mission of consumer information fulfilled by this kind of app: here, consumer information takes centre stage, and the consumer operates as a screen between industrialists and digital operators.

The role assigned to Yuca should be seen in the light of the role assigned to scientific research, and above all in terms of the links between these two players involved in the creation of information and its translation to consumers.

²⁶ Along the same lines, the narrow definition of the whistle-blower (who can only denounce noncompliance with European standards) in the 2019 EU Directive is questionable.

6 The Science to Be Mobilized

6.1 Does Yuca Need to Refer to Exhaustive Science?

From an economic perspective, calling for providing abundant resources to the consumer has raised fears of increased market opacity (Akerlof 1970) and/or about the dilapidation of the consumer's cognitive resources, by lack of preservation of their attention (Goldhaber 1997). This observation was reiterated in a study commissioned by the European Consumer Organization BEUC,²⁷ which stressed the importance of reducing the amount of available information. Information overload, while designed to help the consumer obtain thorough information, can have the opposite effect. It is partly in response to these observations on the negative implications of information overload that digital tools have been cited as a potential answer. The French National Consumer Council has supported the idea that digital technologies may serve as a means to combat labelling overload and to deploy "better information in order to protect consumers' rights" (Gervais, Armand, and Duchemin 2013).

At first instance, Yuca had been faulted for failing to mention "more reassuring information for consumer health that would rebalance the scientific reality", even though an author has argued that "doubt should allow those who express themselves in the name of the precaution principle to stick to sources that support their arguments" (Raynaud 2022, p. 36). The three courts blamed Yuca for lack of professionalism on the grounds that it did not provide the consumer with access to enough scientific studies in order to "reassure" the consumer and allow the consumer to form "their own critical opinion" (Aix-en-Provence and Brive-la-Gaillarde rulings). Because it gave a biased presentation of "established" science according to these judges, Yuca sounded "a strong, anxiety-inducing message of alert, pertaining to serious allegations" (Aix-en-Provence court). The Paris Court described a risk alert message on a "particularly dissuasive item, i.e., cancer"; the Brive-la-Gaillarde Court evoked, about the petition, "an immediate link in the consumer's mind to a risk of exposure to lethal diseases". Failure to include "the wide body of contradictory and reassuring scientific literature from reference bodies" characterizes a deceptive commercial practice according to the Aix-en-Provence Court. Like consumers' organizations, Yuca should, according to the Brive-la-Gaillarde Court, present all contradictory and essential studies in a serious manner. The fact that five out of seven sources were in English was also faulted, likely considered as an obstacle to the consumer's understanding of the science while shopping.

The judicial interpretation, contrasting with the sociological literature's emphasis on the need to give the consumer cognitive relief, is not without its contradictions in

²⁷ https://www.beuc.eu/sites/default/files/publications/x2013_089_upa_form_matters_september_2013.pdf (14 October 2022).

the two first instance rulings that denounce the link to the petition (which requires a reading time that consumers do not have at the time of purchase) while arguing that more studies should be made available to them so that they can form an opinion. For its part, the Paris Court faulted Yuca for "including multiple (...) references to institutions and scientific studies without having the consumer be able to verify the correlation between said studies and the conclusions drawn by Yuca in its product sheets (...)". At odds with the idea that consumers are spoon-fed with standards, the judge here appears to call for an empowered consumer with an increased ability, in the words of the Brive-la-Gaillarde Court, to "contradict or at least nuance [the information] received from SAS Yuca so as to form their own opinion". This is clearly an erroneous appreciation of consumer uses of these digital apps – how many, incidentally, would be able to understand the science in these reports?

On appeal, conversely, the three judges concurred in finding no obligation to exhaustively cite the science. The Paris Appellate Court rejected the requirement of exhaustivity of the scientific documentation, as "the cited sources are credible and consistent". The Limoges Appellate Court also noted "the constraints imposed" by the app "forcing it to limit the amount of detailed information as to ensure a degree of readability".

6.2 Strict Criteria on the Science to Mobilize

Whereas at first instance the judges faulted Yuca for linking to English-language studies, lack of exhaustivity and failure to mention studies that balanced out findings considered as too anxiety-inducing for consumers, the appellate judges laid out criteria that have the benefit of clarity.

First, a procedural criterion was established by one of the three appellate courts. The Limoges Appellate Court proved more demanding than the two others by noting that Yuca draws "on scientific sources selected by its scientific board, directed by a dietitian, and made up of one nutritionist, two toxicologists, an ob-gyn doctor and an agricultural engineer", and in doing so set procedural conditions for the selection of scientific sources. This criterion appears to echo a point raised by industrialists, who criticized Yuca for not having in-house researchers. It may pose a challenge to smaller structures that may not necessarily have a scientific board. It also contradicts the previously cited argument concerning the fact that Yuca has no duty to develop its own scientific production.

Secondly, all three appellate courts noted the number of studies pointing to the hazardous character of nitrites over the long term. The Limoges Appellate Court argued that these studies have highlighted "for many years" "the dangers of processed meats" containing nitrites. It also noted the consistency of scientific findings

("serious and consistent scientific data"). This reflects a logic of prevention of known risks in which citizens must decide to expose themselves or not in full awareness of the data, and in turn the importance of the massive support to scientific research in our societies, having in mind the incalculable number of potentially hazardous substances in circulation. A few months earlier, the Aix-en-Provence Appellate Court had more tentatively called these studies "sufficiently numerous and detailed" and deriving from "an undisputable research effort", adding that "the fact that part of this documentation is in English has no bearing on the validity of this documentary base". This points to the dependence of digital operators on the existing scientific output.

Third, there is also a consensus on the "serious" character of the studies among the appellate judges. The Limoges Appellate Court noted that selected sources "all come from recognized institutions or health authorities, such as ANSES, IARC, EFSA, the National Research and Security Institute, and the FAO/WHO Expert Committee". The same court also found it important that many "communications to the general public" sounded the alert on the risks of nitrites for human consumption. The media coverage and the politicization of the issue appear to have mattered to this Court. It mentioned "serious, numerous studies" making up a sufficient factual basis. Crucially, the judges did not demand "scientific truth", which rarely exists in a risk society. On this point, the Limoges Appellate Court stands out by again being more demanding than its two counterparts, requiring "the existence of numerous and recurrent alerts of a scientific nature, gradually amplified". The studies do not have to be unquestionable. Citing the many studies issued by the IARC, EFSA, and national agencies over fifteen years, the Paris Appellate Court concluded that they "come from serious and reputable sources, even if they can be disputed". According to the Limoges Appellate Court, "the reality of the risks surrounding the use of nitro additives (...) can be regarded as proven in absolute terms", but "it is the level of risk that is subject to scientific controversy, as well as the daily dose level".

6.3 Cautious Judges

In a world where risk governance is challenging and scientific knowledge is complex, the question of the judge's role is raised acutely. In these three rulings, the French judges refused to assess risk levels or the choices made by industrialists.

The Aix-en-Provence and Paris Appellate Courts argued that its role was not to weigh the pros and cons of adding nitrites and only expressly admitted a limited role consisting in taking stock of public and scientific debate. Therefore, the judge's duty is to protect the spirit of controversy "without acting as a judge of science" (Noiville and Hermitte 2006, p. 272), as was illustrated by the case pertaining to Robert's Bell book *Les*

Sept Pêchés capitaux de la haute technologie (Bell 1998),²⁸ in which the judge's duty in the debate was defined as "to prevent it from devolving into insult and malice" rather than "to verify the relevance of the arguments being exchanged".²⁹ The Limoges Appellate Court argued more explicitly that "it is not up to the judges to act as substitutes to the scientists" but to ensure that "the information communicated on the app with respect to the characteristics of the product being assessed come from authorized and sufficiently numerous scientific sources and is not misrepresented". Yet this role requires judges to keep abreast of developments in scientific knowledge.

Conversely, under the North American approach favoured since the 1970s (the "frontiers of science" doctrine), judges conduct a "hard look review" that forces authorities to justify their choices regarding risk regulation. Lastly, in a society where risk regulation is difficult and subject to conflicts between individuals, information mediators and dominant private operators, the implications of the reinforcement of the right to consumer information must be examined.

7 Concluding Remarks

History has evidenced the powerlessness of actors from the scientific,³⁰ regulatory, political and media worlds when it comes to supporting consumer information. In the face of this powerlessness, digital operators can have benefits for market regulation. In the case at hand, the principle of precaution was not implemented; likewise, applying the principle of prevention could have resulted in more explicit labelling on nitrites. In her discussion of the first instance rulings, a scholar has argued that "while the solution proposed by the judge is open to criticism, it most importantly uncovers the shortcomings of regulation on the question of nitrites, which falls short of addressing the risks (mentioned in multiple studies) posed by the addition of such substances" (Rossetto 2022, p. 292).

These cases illustrate the tension between economic freedoms and the implementation of civil and political rights, such as the right to information and expression. Economic freedoms have been interpreted "as primary freedoms encompassing and conditioning the existence and realisation of all other rights and freedoms" (Champeil-Desplats 2011, p. 25). Thus the gap between the first instance and the appeal cases results from a different perception of mobile apps' users: for first instance cases

²⁸ First Instance Court of Boulogne-sur-Mer (France), *Société Eurotunnel contre R. Bell et Éditions du Seuil*, 12 August 1998.

²⁹ This admittedly pertained to research rather than to actions by private digital operators.

³⁰ In EFSA studies, "vital data was neglected", namely "nitrosylheme", according to the French Parliament's Information Report on nitrite salts in the food industry.

they are considered in priority as consumers, that is a weak part to be protected on the economic market and insofar as respect for human rights does not hinder the operation and development of the market according to the neo-liberal economic analysis of human rights (Le Berre 2011, p. 63); for appeal decisions, consumers are protected as Humans deserving the respect of their freedom of expression. The contradictions between the arguments used by Courts are easy to understand when we adopt a pragmatic approach to Human rights which interpretation depends "on the argumentative contexts in which they are used and the purposes for which they are invoked" (Champeil-Desplats 2011, p. 26). Thus, the same right (freedom of expression) can be used to justify a market logic or not. The French judicial cases illustrate the current tension between the neo-liberal approach of human rights and an alternative path, an economic model with social justice or humanist concerns, that some judges would like to oppose. This resonance echoes the work of Lazega and Mounier in their analysis of the impact of contemporary polynormativity on social control in the business world. The authors conclude that there is a need for "reflection on the limits of self-regulation in the business world, and on the new control mechanisms that states must put in place to master bottom-up regulatory processes". In a social world where food controversies are multiplying, the question of new ways of judging economic markets arises. The question that arises is whether or not the appeal judgments actually overturn the neo-liberal approach to fundamental rights; in fact, whether the judges are of the opinion that the right to information takes precedence because its use does not inevitably harm economic interests (no excessive harm to the interests of the market) or whether it takes precedence in itself because of an ethical choice to give precedence to issues of social justice. It would appear that the former approach has been adopted; freedom of expression does not have a relative value, where its social utility would be confused with its market utility.

These judgments highlight the key importance of two elements: the existence of a public debate of general interest and the reference to "serious", "numerous", "public" scientific studies, even in English. Compliance with regulatory levels and the existence of scientific controversies do not matter once risk is admitted in the absolute. The case law shows that neither the regulation of nitrite levels nor the regulation on the mandatory labelling of processed meat products effectively protect consumers against scientifically proven risks to human health. The other main lesson here is that the French judge's role is limited; the judge is not tasked with assessing the level of risks according to the scientific literature, but only with attesting to the existence of numerous, serious and consistent scientific studies on the existence of a risk, even if some minor controversy may remain. As a result, in cases where the studies are disputed or insufficient in number of quality, denigration and/or unfair or misleading commercial practices systematically prevail over freedom of expression. This raises the question, first, of how to guarantee the exhaustivity of scientific studies, and

second, of how to address the pressure applied by the mediators of surveillance that disseminate information and contribute to protecting consumers.

These rulings were issued in the context of the development of digital tools pertaining to tense public health concerns. While the appellate judges admitted that Yuca has a discretionary power when it comes to its rating system, in June 2022, the French Senate, preoccupied by the emergence of these private informational processes, proposed to "set up a public certification of product review apps, tasked with attesting to the scientific pertinence of the assessment criteria and of their weighing as well as of the reliability of the databases being used".³¹ This position is a worthy response to the necessary existence and control of the actors that translate health and/or environmental information. By shifting the focus away from the information itself towards those who disseminate it, it also has the benefit of sparing consumers a cognitively costly verification of the information submitted to them.³² With such a system in place, the judge's role could change considerably; the cases discussed here clearly do not end the debate on these highly sensitive questions.

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32 In doing so, it would also help reduce the opacity of markets and prevent the perpetuation of "informational asymmetry", meaning the perception of a gap resulting from the unequal allocation of information between seller and buyer (as a result of which the bad products overshadow the good ones).

³¹ Sénat, F. GAY, F. Férat et F. BLATRIX CONTAT, Rapport d'information sur l'information du consommateur, n°742, 29 Juin 2022.

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Bionotes

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Élisabeth Lambert is a legal expert and research director within the French National Centre for Scientific Research (CNRS), working in the Law and Social Change Research Unit. In recent years, her field of investigation has been environmental health (the right to a healthy and ecologically sustainable environment/pesticide regulation). Her methodology calls for an understanding of phenomena that enable or hinder the circulation of norms and/or the implementation of supranational rules, the investigation of comparative law, the sociology of law (taking into account the actors and the context in the making of the norm) and the knowledge of social justice. To do this, she values an interdisciplinary approach and a field-based approach with European and national actors of the law and their implementation. This article results from her research program "Taking the right to healthy food seriously" funded by the Institute of Advanced studies in Strasbourg. The objective of this project was to explore the emergence of an individual/collective right to healthy food as a new component in European human rights law.

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