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INNOVATION LETTER

PRICE PERSONALISATION: WALKING THE NOT-SO-BLURRIED LINE BETWEEN INNOVATION AND EXPLOITATION

JEL CLASSIFICATION: K12, K30

1 A Spooky Story

A few years back, I got a nasty bronchitis: for over a week, I could barely leave my bed to reach the sofa. In essence, my main occupation was coughing; and it was quite tiresome, too. The ideal scenario for binge-watching. Which is what I did. Soon, I had watched all my Netflix watchlist, even after having refilled it; twice. Next, I watched all the episodes of The Real Ghostbusters cartoons I could find on YouTube.

You see, I am a 'moderate' *Ghostbusters* fan. Why am I telling you this? Because I used my YouTube account, meaning that YouTube collected the information that in my early 30s, I watched *The Real Ghostbusters* for about 10 hours a day for several days. It does not take great intelligence (artificial or biological) to conclude that I have a 'moderate' preference for *Ghostbusters*.

If YouTube knows it, well, probably everyone in marketing knows it, thanks to data brokering. (You see, back then, I was an 'accept all cookies' kind of guy.) What can be

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done with this information? Consider these two alternatives that illustrate of the difference between innovative and exploitative uses of price personalisation:

1. When *Ghostbusters: Legacy* came out on streaming, I could have been offered extra content for a hefty price
2. A content-sharing platform offers me to rent or 'buy' *Ghostbuster: Legacy* with my account for 50 cents more than my wife, who is not a *Ghostbusters* fan

In this Innovation Letter, I will explain that, even if the first example includes a high price request and the second only a small one, the first should count as innovation, while the second should be considered exploitative. What do these examples have in common? They are both forms of economic discrimination. The first is an instance of versioning; the second is a form of price personalisation.

Section 2 articulates why I see no critical issue in the first case, but plenty thereof in the second one. Then, Section 3 draws attention to the complexity the total welfare view of efficiency implies in the context. Section 4 sketches a regulatory framework to deal with the second case. Section 5 will conclude with some considerations derived from a project I am about to conclude concerning price personalisation.

This topic is worth an innovation letter because the first case is 'business as usual', while the second might become the new normal. Yet, I will argue that even if the second case is the granular version of what we experience nowadays, the fact we tolerate it in some cases does not mean we should allow its granular version that we expect to become widespread sooner or later.[1]

In sum, I intend to offer an account that distinguishes desirable uses of price personalisation that should count as innovative business practices from uses that are exploitative and should be treated as such.

2 Analysis: Distinguishing innovative and exploitative uses of price personalisation

2.1 The morality of versioning: pricy innovation, but only if you want it

Versioning is the practice of offering multiple versions of the same product or service, often with premium versions charging an amount that is clearly above their marginal cost. Business class tickets on airplanes are a good of this.

Suppose that, like me, you see the market mechanism as a means to maximise consumer welfare or, more precisely, to implement a rich notion of consumer

[1] Joseph Turow, *The Aisles Have Eyes: How Retailers Track Your Shopping, Strip Your Privacy, and Define Your Power* (Yale University Press 2017).

sovereignty.[2] Why is versioning fine? After all, some consumers end up paying way more than what it costs to produce the good or service they enjoy. Surely, we can imagine idealistic scenarios where innovation attempts are not uncertain and where there are no fixed production costs. Probably, in said scenarios, versioning would deserve strict scrutiny.

However, in the world we live in, I find that the power to choose between the cheaper and more expensive versions of the same good or service is sufficiently respectful of consumers. Surely, there is a positional dimension in consumption that does not receive enough attention.[3] For example, cars have become increasingly big over the decades. This is an important social dimension of consumption, but one that has probably to do with consumer responsibility towards the environment and future generations.[4] Envy for passengers with larger seats and better food does not deserve moral attention.

In sum, versioning is normally acceptable. If this is the case, using my personal data to draw my attention to a deluxe version of the *Ghostbusters: Legacy* movie that is expensively priced seems fine.

2.2 The immorality of personalised surcharges: commodifying yourself and profiting from it

Like the example I gave at the beginning, a personalised surcharge is any price applied to someone higher than the price charged to someone else just because the trader has reason to believe that one consumer is willing to pay more than the other.

Of course, in many contexts where bargaining takes place, the price asked by a party is the starting point for negotiations. A commercial airing these days in Italy shows a couple looking for a house to buy that, before meeting the seller, reinforce the need to hide any belief, emotion, and so on to each other. But the house is so amazing they keep fainting in each room they enter. Very funny; it is just the most important financial commitment in their life, most probably.

Similarly, one is advised not to wear expensive clothing and accessories when visiting a flea market. In all these cases, the trader can use information about yourself you make available to them to increase the price.

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[2] Fabrizio Esposito, *The Consumer Welfare Hypothesis in Law and Economics: Towards a Synthesis for the 21st Century* (Edward Elgar 2022); Fabrizio Esposito, *The Consumer Welfare Standard, Consumer Sovereignty, and Reciprocity: An Evolutionary Foundation for the Positive Economic Approach to Law That Actually Works* (SSRN 2023).
[3] Robert H Frank, *The Darwin Economy: Liberty, Competition, and the Common Good* (Princeton University Press 2011). See, more generally, Ugo Pagano and Massimiliano Vatiero, 'Positional Goods and Legal Orderings' in Alain Marciano, Giovanni Battista Ramello (eds), *Encyclopedia of Law and Economics* (Springer 2017) 1613-1618.
[4] For a recent discussion of the role of this concept in EU law, see Lucila de Almeida and Fabrizio Esposito, 'Consumers and the Green Transition Between Saying and Doing: Promising Consumer Empowerment while Restricting' [2023] Yearbook of European Law.

Why can't an online platform do the same, then?

For a few reasons, really. First, in a face-to-face negotiation, bargaining goes both ways. Online, this is not the case; you cannot make counteroffers to an online store. Second, the degree of granularity in the use of personal information against consumers in the digital environment reaches unprecedented levels of granularity. This is unsurprising since the transaction cost savings of using price tags in the digital environment are way lower online than in offline settings.

So, to see the problem with personalised surcharges, we need to identify an ideal theory setting (without all the complications of the real, imperfect world) to establish a benchmark, and then look at the normalisation of price personalisation against said benchmark.

Under ideal conditions, on every market, at the same time, consumers maximise the benefits they receive, under the sole constraints represented by their preferences, the cost-reflective (or natural[5]) price, and their initial endowment. Under these ideal conditions, traders do not manage to benefit from knowing how much consumers are willing to pay because traders are price-takers.[6]

When price personalisation is possible, traders are not price takers. It follows that any expansion of price personalisation practices should be welcomed with suspicion. This consideration helps explain why price personalisation has attracted so much scrutiny among legal academics in the absence of overwhelming evidence of the practice being diffused.

Be this as it may, sometimes price personalisation can be beneficial to consumers and is, therefore, welcome. This is in particular, the case when it allows consumers who cannot pay market prices to access the market thanks to a discount. Another situation is that in which traders can use personalise discounts to make their competitors' customer base more contestable – for example, Pepsi offers targeted discounts to Coca-Cola loyal consumers; in this way, competition is increased under conditions of quality differentiation.

Notably, in both these cases, price personalisation makes real markets closer to ideal ones: it gives access to the market to consumers who would access it under ideal conditions; it stimulates competition between partial substitutes (under ideal conditions, substitutes are perfect).

None of this happens in the example I gave above. In said example, the content platform has collected my data and then used them to extract more economic rents from me, giving me nothing in return. In said example, the pricing novelty is used to

[5] Gianni Vaggi, 'Natural Price', in *The New Palgrave Dictionary of Economics* (Palgrave Macmillan UK 2018).

[6] More extensively, Patrick Coen and Natalie Tieman, *The Economics of Online Personalised Pricing* (Office of Fair Trading 2013). <https://webarchive.nationalarchives.gov.uk/ukgwa/20140402154756/http:/oft.gov.uk/shared_oft/research/oft1488.pdf> accessed 18 March 2024.

commodify part of what makes me 'me', namely my idiosyncratic, childish(?) passion for *Ghostbusters*. This novelty does not perform a desirable social function and, therefore, does not deserve to be called innovation. The Chinese get it: they call said practice big data backstabbing or swindling;[7] once the practice is named like that, it is apparent that it is tough to defend it in the public sphere.

I see no moral reason that justifies the possibility of taking my preferences, commodifying them, and selling them back to be, tied with a product sold to me for a price higher than everybody else's. It is invasive and exploitative. It moves us further from the ideal conditions of perfect competition, rather than closer to them. Thus, it should be prohibited.

The only reason I see to tolerate the practice is that it would be so costly to detect it that the cure would be worse than the disease. But the debate has not reached this point yet. Also, it is quite likely that, with some effort, cheap enftech solutions will be found.[8] This is an innovation worth pursuing in the context of price personalisation and pricing policy more generally.

3 Focus: Total welfare and analytical complexity

The previous analysis is not widely shared. Why? Because I move from a conceptual framework where the interest of consumers is at the core of economic analysis.[9] This is not what most people do nowadays. It used to be different in the past. Nowadays, market efficiency is about total welfare.

The point is that much of the scholarship on price personalisation moves from a very 'pluralistic' normative framework where there is total welfare, fairness, equality, distributive justice, at least.[10] When that is the case, it is easy not to know where to draw the line. The result is a legal bubble,[11] caused by a mixture of normative complexity, empirical uncertainty[12] and interdisciplinary opacity.

[7] Stella Chen, 'Big Data Swindling' (China Media Project, 5 October 2021) <https://chinamediaproject.org/the_ccp_dictionary/big-data-swindling/> last access on 8 December 2023.
[8] Liz Coll and Christine Riefa, 'Exploring the Role of Technology in Consumer Law Enforcement' (2022) 34 Loyola Consumer Law Review 359.
[9] Esposito (n 2).
[10] See, for example, Frederik Zuiderveen Borgesius and Joost Poort, 'Online Price Discrimination and EU Data Privacy Law' (2017) 40 Journal of Consumer Policy 347 and Oren Bar-Gill, Cass R Sunstein and Inbal Talgam-Cohen, 'Algorithmic Harm in Consumer Markets' (2023) Harvard John M Olin Discussion Paper, No. 1091 <http://www.law.harvard.edu/programs/olin_center/papers/pdf/Bar-Gill_1091.pdf> accessed 18 March 2024.
[11] Marco Giraudo, 'On Legal Bubbles: Some Thoughts on Legal Shockwaves at the Core of the Digital Economy' (2022) 18 Journal of Institutional Economics 587.
[12] Cf Fabrizio Esposito, Mateusz Grochowski and Kimia Heidary, 'Price Personalization', in Kimia Heidary, Vanessa Mak and Gitta M Veldt (eds) *Empirics and Consumer Law in Changing Markets* (Edward Elgar forthcoming) surveying the findings of empirical legal studies on this topic and limits thereof.

When, instead, you move from an ideal theory where the core of the market mechanism is consumer welfare maximization, it is hard to see why traders should be allowed to extract rent from consumers. As simple as that.

If, for some reason, under special circumstances, traders think it is defensible to do so, legal systems offer them plenty of occasions during both the regulatory cycle and the enforcement process to explain themselves. And judges have multiple techniques at their disposal to allow for an exception.[13]

4 Action: A regulatory framework that may work

Suppose we have a sense of situations where price personalisation is desirable and of situations where it is not desirable. In that case, we can try to figure out a framework that allows for the former and prohibits or at least makes less likely the latter.[14]

In the European Union, I have argued elsewhere and at length that traders have a duty to offer a price not based on personal data, especially in those economic contexts where they could be tempted to offer personalized surcharges.[15] This duty is primarily derived from the GDPR.

Thus, the information duty about personalised prices could require traders to disclose said price in the form of a discount or a surcharge in comparison to this impersonal price. Especially if consumers have an easy way to opt out of the personalised offer, one of two things will happen: either consumers selfishly choose the lower price (which is fine by me), or traders will give consumers reasons to stay with the personalised price. In essence, price personalisation will look way closer to versioning. If traders convince consumers to pay more when paying less is possible via rational persuasion, then I see no problem. Just like I see no problem with voluntary tipping, which is also a form of price personalisation.

The only problem left is avoiding traders artificially increasing the impersonal price and then offering personalized discounts to everyone. When we get there, between the new provision about reference prices in the Price Indication Directive (Article 6a) and the long tradition of anti-usury laws, we will eventually find a way to ensure the integrity of the impersonal price. We just need to put our minds to it.

Some scholars derive from the possibility of artificially increasing the impersonal price to everyone that there is no point in intervening. This is nothing more than a textbook

[13] Luís Duarte d'Almeida, *Allowing for Exceptions: A Theory of Defences and Defeasibility in Law* (OUP 2015).
[14] Fabrizio Esposito, 'Making Personalised Prices Pro-Competitive and Pro-Consumers' (2020) Cahiers du CeDIE Working Papers, No 2020/02.
[15] Fabrizio Esposito, 'The GDPR Enshrines the Right to the Impersonal Price' (2022) 45 Computer Law & Security Review 105660.

application of the conservative move Albert Hirschman called the Futility Thesis: there is no point in trying to improve the outcome; the market will make your efforts moot.[16]

5 The forthcoming Cambridge Handbook on Algorithmic Price Personalisation and the Law[17]

The handbook includes chapters by leading scholars who have analysed price personalisation from a variety of perspectives, including moral, historical, marketing, economic, and data science. The core of legal analyses focuses on EU law, is then complemented by overviews of the Brazilian, Canadian, Chinese, Indian and US legal systems.

Two points are worth anticipating here: first, contrary to what much (but not all) law and economics scholarship would suggest (also in the book), one finds broad normative convergence between moral and economic analysis in the direction sketched in this innovation letter; second, contrary to the self-celebratory view that the European Union is the best regulator in the world,[18] the regulatory experience of the other jurisdictions surveyed in the handbook are rich in useful insights, also for the European legislator.

[16] Albert O Hirschman, *The Rhetoric of Reaction: Perversity, Futility, Jeopardy* (Harvard University Press 1991).
[17] Fabrizio Esposito and Mateusz Grochowski (eds), *The Cambridge Handbook on Algorithmic Price Personalization and the Law* (CUP forthcoming).
[18] Cf Anu Bradford, *The Brussels Effect: How the European Union Rules the World* (OUP 2020).