



Citizen Consumption and Public Policies: Good Complements against market failures ?

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Résumé

*Consommation citoyenne et politiques publiques:
bons compléments contre les défaillances du marché ?*

La consommation citoyenne est devenue au cours des dernières années un comportement important, par lequel les individus expriment par leurs choix de consommation leurs préférences politiques, environnementales et éthiques. Cet article questionne l'effectivité de cet instrument contre les défaillances de marché. Au total, il apparaît que la consommation citoyenne soit à considérer comme un complément aux politiques publiques.

Mots clés : consommation citoyenne, environnement, éthique, politiques publiques.

Abstract

Citizen consumption has become over the past few years an ever growing type of behaviour, in which citizens express by their consumption choices their political, environmental and ethical preferences. This paper wonders to what extent citizen consumption may represent an effective and fair instrument against market failures. Overall, it seems that it is better to consider citizen consumption as a complement to public policies.

Key words : citizen consumption, environment, ethics, public policies.

Classification JEL : P16, Q56.

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I/ Introduction

"My dream would be to see an emerging movement of citizen consumers, driven by the youth and refusing every carbon-consuming product. It is the only thing that could make multinational firms and governments radically change trajectory. Anyone should do its own carbon assessment."

Rajendra Pachaury
ICCC Chairman
Nobel Peace Prize 2007
November 2008

According to Rajendra Pachaury, the solution to global warming (and potentially other global environmental concerns) could only result from voluntary movements such as citizen consumption. The concept of citizen consumption, frequently assimilated with the one of sustainable or responsible consumption may be defined as *"a consumption practice aimed at engaging the citizens' moral responsibility and taking into account social and environmental criteria in the purchase process according to the sustainable development principle"* (Mylondo, 2005). It thus refers to consumers preferences towards goods and services with social and environmental production and distribution conditions that are consistent with sustainability (Begaudin et al., 2007; Ferrando y Puig and Giamporcaro-Saunière, 2005). The seminal event related to sustainable consumption seems to be the United Nations Commission for Sustainable Development symposium held in Norway in 1994. During this symposium, sustainable consumption was defined as *"the use of services and related products which respond to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life-cycle so as not to jeopardize the needs of further generations"* (Norwegian Ministry of Environment, 1994). Generally, the argument is that changing consumption patterns (through education, taxation, product labeling) drives changes in production practices toward the provision of greener goods and services (RITIMO, 2006). In this paper, we thus define citizen consumption as consumption behaviors that are consistent with and/or express citizen convictions. In this sense, environmental-sensitive consumers consume green products, child-care consumers boycott child labor... Over the past few years, citizen consumption has taken an ever growing importance. Social and environmental certification, eco-labeling, consumer boycotts constitute increasingly popular tools used by individual citizens or activists groups. Moreover, markets and business actors have taken this evolution into account, promoting and providing greener and certified products, communicating heavily on their environmental and social performances.

From an economist point of view, and focusing on environmental damages, excessive pollution is the consequence of a market failure, i.e a source of market inefficiency¹. This market failure is equivalent to a misallocation of resources due to weak or non-existent property rights: being open-access, clean air and water are naturally outside markets. Thus polluters do not take into account the social costs of their actions, which result in an over-provision of pollution. Pollution is a negative external effect (or externality²) of production or consumption activities, that is a by-product of those economic activities. Moreover, this by-product is indirect, in the sense that it concerns essentially other agents than the one exerting the activity. Thus, it represents a cost not taken into account through price mechanisms. This externality brings an over-provision of pollution (because of under-

¹ Although focusing on environmental concerns, the following analysis of externalities and resource allocation is also valid to other concerns of citizen consumption. For instance, Pallage and Zimmermann (2007) consider child labour as a negative externality.

² Externalities are unintentional side effects of an economic activity affecting people other than those directly involved in the activity, without any compensation. A negative externality is one that creates side effects that could be harmful to either the general public directly or through the environment degradation.

pricing), which is sub-optimal in terms of global welfare (Bishop, 2004).

Economic instruments to correct for environmental damages thus aim at giving a price to those externalities and a proper allocation of resources (who own the rights to clean air?). Three types of solution to this kind of market failures may be distinguished (Borkey et al., 2000). First, regulatory instruments (emission standards, quotas, product bans) consist of mandatory environmental performance imposed by public authorities. Second, direct economic instruments such as environmental or Pigovian taxation (Pigou, 1920) constitute a coercive but market-based way to internalize negative externalities. Environmental tax should indeed be designed to meet the social cost of pollution. In this case, public policies obviously have a central role to correct market failures. Finally, voluntary approaches consist of firms committing to improve their environmental performance. Voluntary approaches may take the form of unilateral commitments made by polluters. More frequently, they come from agreements and bargaining between polluters and actors affected by pollution (through the action of NGO's, public authorities, individual actions). In this sense, Coase (1960) is often considered as the seminal paper at the roots of voluntary and decentralized environmental economics. Indeed, Coase's theorem tells us that, if transaction costs are negligible, the market will come out with allocations that are based on the parties' relative values. When applied to environmental externalities, Coase's theorem predicts that interactions between parties will come out with the full internalization of negative externalities. In this sense, government intervention is typically not necessary as long as the parties involved could strike a voluntary bargain.

The options for dealing with externalities are thus numerous, and often depend on the characteristics of the externality. The key is to identify the particular tool or policy alternative that will best move the market towards the most efficient allocation of resources. An important part of the environmental economics literature deals with this optimal design of environmental policy. Several authors consider the different solutions (particularly public policies and voluntary) as alternative and compare them in terms of relative efficiency or equity (Charles, 2009; Fitoussi et al., 2007; Grolleau et al., 2004; Chiroleu- Assouline, 2007; Conrad, 2001; Wu, 1999; Riera et al., 2007; for example); when others try to combine them into some policy-mix (Lee and Yik, 2004; Johannsen, 2002; OECD, 2003; Braathen, 2005 for example). Citizen consumption unambiguously represents a decentralized and voluntary response to negative environmental externalities. In this sense, it may be seen as the continuity of the Coase's theorem: if consumers care about the environment, the market will at some point (through certification or political activism) emerge with an internalization of those negative externalities.

In this context, how could Pachaury's comment be interpreted? Would citizen consumption be a sufficient condition to internalize environmental externalities? On the one hand, one may consider that citizen consumption can be a potential solution to environmental concerns, and thus represent a substitute to public policies. On the other hand, citizen consumption may be considered as a way to enhance public policies effectiveness and to boost public policies ambitions, by impulsing change. More broadly, the concerns of this paper are twofold: it first explores the question whether soft policies are a strong enough instrument to efficiently undermine environmental degradation, when compared to traditional approaches; second it questions the potential role played by consumers to drive firms' behavior.

This paper precisely describes citizen consumption in the light of Coase theory, pointing out its shortcomings in the case of citizen consumption. Then, we focus on the potential complementarity between citizen consumption and environmental policies. Section 2 gives a brief overview of citizen consumption behaviors. Section 3 focuses on citizen consumption weaknesses, which prevent it

from being a good substitute to public policies. Section 4 shows how these weaknesses could be addressed to turn citizen consumption in a potentially suitable complement to public policies.

II/ Overview of Citizen Consumption behaviors

Citizen consumption may take several forms, depending on the consumers' objective and their political involvement. It is then possible to distinguish citizen consumption by the strength of political involvement it implies. Soft citizen consumption thus consists essentially of practices aiming at behaving accordingly to one's convictions, and eventually to signal environmental preferences. In contrast, harder citizen consumption, such as consumer boycotts, aims essentially at coercing change in the firms, governments and other citizens' behaviors.

II.1/ Soft Citizen Consumption: Responsible consumption and certification

Responsible consumption is taking an ever more important place in modern economies. Indeed, consumers now frequently choose green products, organic food, free animal-testing cosmetic goods, energy-saving goods in order to behave accordingly to their convictions. It is estimated that green products account for approximately 9% of all new-product introductions in the United States (Marketing Intelligence Service Ltd., 1999). According to Guy Ryder, General Secretary of the International Trade Union Confederation, the green industry in the USA accounted for 5.3 million new jobs in 2005 (Ryder, 2008).

By integrating their environmental preferences in their consumption practices, consumers thus reconcile the direct satisfaction they derive from consumption with their self-esteem of not betraying their convictions. In this context, they accept to pay a potentially important price premium for goods attributes that are not directly related to the utility of consumption, but to production processes or consumption externalities (pollution, waste, natural resource use...).

However, those credence attributes are usually not observable, either before or after purchase and use. For example, the environmental quality of production processes is unobservable to consumers. Henke (2004) thus considers information disclosure as an environmental policy instrument by itself. Labels are thus adopted to overcome this informational problem. In this context, certifiers play a central role. Their main duty is to certify that a particular good has been produced accordingly to a set of standards. These organizations need independence, objectivity and transparency, in order to induce consumers' trust. However, the information asymmetry is not necessarily solved as low quality firms might have possibilities and incentives to usurp the high quality firm. High dissuasion cost is a necessary but not a sufficient condition for avoiding free-riding behaviors on the label (Mason, 2006; Ibanez and Grolleau, 2008).

Responsible consumption thus needs credible certification in order to be effective. Certification may be seen as a voluntary internalization of pollution. Indeed, the cost of the externality is partially integrated through the price premium, and borne by citizen consumers. When it refers to Coase theory, one may say that the risk premium consists of a property rights transfer of the environment from firms to consumers: firms are given the right to pollute, and sell it to citizen consumers.

However, it is worth noting that cleaner production may have in some circumstances a rebound effect leading to quite small if not negative impacts on environmental quality. Indeed, following the Porter hypothesis (Porter and van der Linde, 1995), if environmental innovations give rights to cheaper and more efficient products, they may tend to increase overall consumption. Then, even if individual pollution would decrease, overall pollution may increase because of a raise in

consumption: cars are less polluting than 50 years ago, but there is a lot more cars nowadays and higher air pollution due to car transportation.

II.2/ Hard Citizen Consumption: Consumer boycotts and political activism

Consumer boycotts may be seen as a step beyond responsible consumption. Indeed, the objective here is not anymore just to find a compromise between consumption and personal convictions, but to signal issues and to coerce change in the firms or governments behaviors. "Consumer boycotts", i.e. the individual or collective choice of not buying some product, is now a frequently used tool by NGOs or lobby groups to protest against unfair marketing, social or environmental practices (Friedman, 1995).

Consumer boycott upon environmental arguments is a strategy commonly used by many environmental NGOs: cosmetic firms are boycotted for their use of animal testing (Davidson, 1995); major oil companies have been targeted, for their environmental damages and their supposed lobbying efforts to deter climate change policies (Skjærseth and Skodvin, 2001); some large fast-food companies have been boycotted because of their supposed environmental unfriendly way to produce meat (Garret, 1987); NGOs support the boycott of non-certified tropical timber, to protest against unsustainable harvest practices and corruption (Klooster, 2005). More generally, websites compile current boycotts that may be launched (e.g: www.ethicalconsumer.org).

One of the most famous boycott successes is certainly the Brent Spar case (Zyglidopoulos, 2002). In 1995, Shell Oil was planning to sink a 14 500 ton oil platform in the North Atlantic Sea. The environmental organization Greenpeace initiated a vast protestation movement to oppose this practice. Activists occupied the Brent Spar platform, 200 Shell service stations were threatened in Germany and a widespread boycott of Shell took place. After a few months, Shell canceled its plan for deep sea disposal and decided to recycle the entire structure.

Consumer boycotts may be seen as a war of attrition between a group of consumers and a targeted firm (Delacote, 2008; 2009). The ability of the boycotting group to hurt the firm's profit sufficiently to induce change is the main element determining the chance of success of this type of action. Thus, the share represented by the boycotting group in total demand is crucial. A large proportion of environmentalist consumers would tend to increase the likelihood of success (but would probably make coordination failures more likely). Again, the hurting capacity of the boycotting consumers is greater if their expenditure on the targeted product is relatively high. However, such consumers usually have high boycotting costs as they renounce a higher utility of consumption, and are thus less likely to participate in the boycott. Indeed, the action of boycotting is costly to consumers, since they have to postpone the consumption of a good they enjoy or need consuming. This direct cost depends on several factors such as the consumed amounts, availability and price of good substitutes and environmental preferences.

In Coase's terminology, consumer boycotts may be interpreted as an attempt by citizen consumers to claim rights on the production process. This type of action can be successful if the consumer preferences (e.g.: environmental quality) are stronger than the firms ones (e.g.: short-term profit). In this case, successful consumer boycotts lead to a switch the choice process of the production technology (Delacote, 2009).

II.3/ From citizen consumption to responsible firms

A direct consequence of such a type of consumption is that private firms may voluntarily engage in

costly actions to show their environmental or social responsiveness. For example, since 1999, over 400 large corporate retailers and users of timber products have agreed to phase out all products of old growth forests and to give preference to wood that is certified as "environmentally friendly" by the Forest Stewardship Council (FSC) (Innes, 2006).

First, soft citizen consumers may enhance firms' responsible behaviors. Indeed, if the price premium that consumers are willing to pay is sufficiently high, integrating environmental concerns in the production process may be profitable. Firms may thus be willing to be certified as "green", in order to capture this premium. In this case, the emergence of certification and eco-labeling may naturally integrate externalities into the market. Overall, firms may thus engage in responsible behavior because it is rewarded in the market place. Take the example of consumers sensible to animal well-being. Those consumers are likely to be ready to pay more for products that do not use animal testing. If the market is sufficiently reactive, it is likely to come out with firms certifying that their products have been produced free of animal testing (e.g.: The Bodyshop).

Second, the threat of consumer boycotts may be an incentive for private firms to respect environmental norms. Indeed, potential boycotts represent future losses due to the consumption switch. A large number of retailers were subject to boycott by the Rainforest Action Network and others until concessions were made to end marketing of old growth timber and adopt FSC standards (Barker, 2002). Food retailers limited genetically modified content due to fear of boycott by Greenpeace and others (Koenig, 2000). Animal rights reforms by McDonalds and other food retailers were preceded by short and virulent boycott efforts by the People for the Ethical Treatment of Animals (PETA) (Zwerdling, 2002). Recent empirical work finds that the threat of boycott is a significant explanation for corporate environmentalism, over and above any "green marketing" and regulatory incentives that may be at play (Sam and Innes, 2004).

In some sense, citizen consumption thus represents for many firms a stick-and-carrot type of incentive. Responsible consumption may represent potential profit to derive from certification and the price premium that consumers are willing to pay. Conversely, the threat of consumer boycotts can be considered as the ultimate punishment that firms may pay from their irresponsible behavior. In this context in which firms communicate ever more on the environmental friendliness of their products, the temptation of "green washing" may be high. Indeed, consumers have an imperfect perception of the real. Thus they may be misled by some firms' communication process. In this context, trustful certification has precisely a key role in providing fair information and restoring confidence in the consumers mind.

III/ Citizen Consumption: was Coase right?

As shown before, citizen consumption is taking an increasing importance. A natural question is to what extent those consumption patterns emerge as a solution to environmental concerns. Indeed, following Coase theory, a tempting idea would be to think that market approaches could efficiently deal with environmental issues: if consumers integrate their environmental preferences in their consumption behaviour, and if the market is sufficiently reactive, it would then integrate environmental quality as an attribute of the goods, and environmental concerns would be internalized by the consumers will. Thus, if public policies are not able to correctly deal with an issue, citizen consumption, by integrating externalities such as pollution, could redress those public policies inefficiency. However, crucial shortcomings temperate this optimistic view about market outcomes.

III.1/ Economic and political power in citizen consumption

A crucial limitation of Coase theory in the context of citizen consumption is the analogy made between consumers and citizens. Indeed, for citizen consumption to represent an effective way to internalize pollution and other externalities, consumers' preferences need to be consistent with the entire society preferences. In other words, it would consist of considering consumers as representative of the whole concerned community.

In the context of global issues (global warming, biodiversity losses...), however, most concerned citizens are not necessarily consumers. Indeed, consumers' practices are an important vector of global warming. However consumers are to some extent very different from the main global warming victims. To remain simple, industrialized countries (and their consumers) are for a large part responsible for global warming, while top victims are among people from the developing South. In this context, it is likely that northern consumers do not feel the same emergency that Southern victims would claim for.

This analogy between consumers and citizens is thus quite questionable in terms of fairness. There is no guarantee that consumers' preferences are representative of the whole community preferences. Many concerned citizens (from the developing South) are mainly outside the market or have small economic importance. Citizen consumption in this sense raises the problem of excluding market from democratic systems of legitimation (Baldwin, 2008). Putting too much confidence in citizen consumption would thus consist of introducing a political decision bias, creating what could be called a "consumarchy", in which richer or larger consumers would have more influence than poorer or smaller ones.

III.2/ Coordination and consumers market power

To have large macroeconomic impact, citizen consumption needs to be of a large enough scale, in order to properly shape the market outcome. This scale depends essentially on the consumers' market power. Individual consumers usually have marginal market power, which implies that collective action must emerge in order to have significant impact. However, consumers are generally poorly integrated, and thus are likely to be concerned by usual problem of collective action (Delacote, 2009). Indeed, citizen consumption is costly. Consumers have to pay a premium for better environmental quality or to postpone the consumption of a good they like. Individual consumers thus have to trade off a costly action against its small positive impact. If each individual take this trade off into consideration, we are in the usual coordination problem of the voter's paradox (Downs, 1957): a costly action with virtually no marginal impact.

Moreover, individual consumption behaviors are largely anonymous, and there is no real social control of consumption. Thus even environmentally-sensitive consumers have an incentive to free ride. Even if preferring the emergence of green consumption at a global scale, individual consumers are confronted to the usual prisoner's dilemma: global green consumption could be an optimal situation, but individually, green consumption is strictly dominated by regular consumption. This effect is important here especially because of the atomicity of individual consumers. In other words, why would I invest in costly actions with marginal impact if nobody does the same?

In this sense, the lack of coordination and free riding issues may plague the influence of citizen consumption. Even if consumers have strong environmental preferences, they are likely to be discouraged by the cost of responsible consumption, while discouraged by its relatively marginal impact.

III.3/ Information and shaping of public opinion

On the other hand, a crucial weakness of citizen consumption may arise from the fact that consumers may not be sufficiently informed. Imperfect information has two main consequences.

First, imperfectly informed consumers feel concerned by issues of which they have some knowledge. Thus, the information source is a crucial element. The common opinion is that citizen consumers are usually well informed about the issues by which they feel concerned. However, the choice of those issues may be directly influenced by issues broadcast by mass media or NGOs. In summary, a good news subject is not necessarily crucial in terms of social welfare. Indeed the choice process of covered issues may not be directed by social welfare consideration. In contrast, those issues may be selected because they are spectacular or because they easily mobilize public opinion. For example, considering the Brent Spar case mentioned above, Greenpeace admitted in September 2005 inaccurate claims that Spar contains 5,500 tones of oil and apologized to Shell. In this case, mass media widely covered the event, helping to create an important event out of inaccurate information.

Second, consumers may be imperfectly informed of the actual environmental quality of the good they consume. As mentioned before, the temptation of green washing is high if consumers do not have clear information about the goods characteristics. This is precisely the role of certification to provide information about unobservable good characteristics. However, certification schemes may be quite impenetrable to consumers. Indeed, usual consumers habitually do not know what is the real quality behind environmental-friendly or fair-trade goods. In this case, they just know that the certified good is somehow better than the regular good, but have not any idea of the extent of the improvement. For example, some alternative cosmetic firms provide and communicate on products using forest products provided by the Kayapo, an indigenous nation inhabiting a southern part of the Amazon forest. This project is integrated more generally in a "Trade Not Aid" approach: helping poorer people to develop instead of waiting for public aid. However, it has been estimated that the Kayapos do not really fully benefit from this programme and that the real importance of their participation in the production process is relatively marginal (Turner, 1995).

Effective citizen consumption requires transparent and trustful information. Conversely, the continuous flow of information may be source of confusion. Moreover, some actors (firms, NGOs, governments) may be tempted to manipulate available information and bias consumers point of view.

Overall, it seems that citizen consumption is too a weak instrument to efficiently deal with global concerns. However, citizen consumption can be seen as a profitable complement to public policies.

IV/ Citizen Consumption and public policies: good complements?

Public policies may enhance citizen consumption efficiency³, for example by offering market conditions. On the other hand, citizen consumption may increase the efficiency of public policies, considering for instance environmental taxation.

IV.1/ Market shaping

Public policies may enhance the influence of citizen consumption on the market outcomes. Indeed,

³ Although more effective may not be related to decreased environmental damage (in the case of a rebound effect).

some market characteristics are crucial to provide good circumstances of success.

First, the emergence of certification and green labeling constitute a market diversification. Thus, barrier to entry constitute a potential limitation to citizen consumption. Indeed, it is clear that if a firm using a polluting technology is in a monopoly position, it is difficult for consumers to influence this firm if there is no good clean substitute on the market. Conversely, free entry increases the likelihood that a firm enters the market using a cleaner technology. Overall, it seems reasonable to assume that competition increases the chances of the clean technology being present on the market. Indeed, if there is free entry, there is room for ecological certification and green labeling; a firm may choose to enter the market and to produce the good with the clean technology, if it is profitable. It may be of government responsibility to make room for efficient competition practices.

Second, effective policy for governments wishing to sanction an increase in the influence of citizen consumption could be to facilitate the emergence of credible and trustworthy ecological certification, with comprehensive and clear sets of rules defining labeled products. Governments may choose to create directly certified labels, or insure labels quality by creating control organizations.

For example, the European Union defines the process by which agricultural products may be labeled as organic. In order to have the right to signal the organic logo of the European Union, the producer has to pass by a strict certification process. Every farmer has to be inspected by a public or private authority that has been approved by the relative member state. Overall, the European Union designs and monitors the whole certification process, and communicates on it, with the objective to inform consumers about the trustworthiness of organic food (European Commission, 2008).

IV.2/ Environmental taxation and citizen consumption

The European Commission considers market-based and mandatory instruments such as environmental taxation as a key instrument in controlling environmental degradation and climate change (European Commission, 2007). Indeed, following Pigou (1920), environmental taxation (and equivalently subsidy) is a determinant way to internalize the social cost of polluting activities. Moreover, pigouvian taxation is a potentially efficient way by which governments may increase citizen consumption influence. Conversely, citizen consumption may increase environmental taxation efficiency.

First, the impact of environmental taxation on the rise of certification may be important. As mentioned earlier, certified consumption consists of paying a premium to have guaranties about some good unobservable characteristics. Thus environmental taxation (and eventually subsidy) reduces the premium that consumers have to pay for environmental friendly goods. By increasing the price of non-certified (or polluting) goods (taxation), and eventually by decreasing the price of certified (or non-polluting) goods (subsidy), it is clear here that taxation may have a great impact in reducing the cost of citizen consumption, by switching part of the burden on goods related to environmental degradation.

Second, environmental taxation may increase the likelihood of boycott successes. Indeed, the action of boycotting presents the opportunity cost of not consuming some good. A tax on the price of this good naturally decreases the consumer surplus of the non-boycotting situation, decreasing thus the opportunity cost of boycotting. Similarly a subsidy on clean substitutes also decreases the cost of

boycotting, by increasing the surplus derived from the consumption of the substitute (Delacote, 2009).

Overall, environmental taxation is a way for public policies to decrease the cost of citizen consumption, and thereby to increase its influence in the market place.

V/ Conclusion

Citizen consumption may take several forms, from green consumption to consumer boycotts. Following Coase analysis, it can be seen as a way to integrate consumer environmental and social preferences to markets. In this sense, citizen consumption may be referred to as voluntary approaches to environmental issues, when compared to mandatory approaches like taxes. However, even if these consumption patterns are taking an ever growing importance and have a non negligible impact on the market outcome, they do not seem to constitute an efficient substitute to public policies. Indeed, individual behaviours are difficult to integrate, and people concerned by citizen consumption are certainly of too small size to represent with efficiency and fairness every citizen. In this sense, considering citizen consumption in the light of Coase theory would be a too optimistic option.

However, citizen consumption may be a key complement to public policies. First, governments may create the conditions to maximize citizen consumption efficiency, by helping the emergence of trustful certification and facilitating information and education. Second, they may reduce the cost of citizen consumption, by implementing relevant fiscal policies to make polluting consumption more costly and green consumption cheaper. Overall, if we are far from Coase's point of view, citizen consumption has a potentially important role to play in mitigating environmental degradation, which should be taken into account in the implementation of public policies. The European environmental policy already implicitly integrates this potential complementarity, mixing soft and traditional environmental policies, and favoring market-based environmental management and structuring markets.

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