(2026) 56, 339–364

The Review of Regional Studies

The Official Journal of the Southern Regional Science Association

Lexical Text Modelling of Place Identity, Product Identifiers and Review Imaginaries: Pattern Analysis of Wine Quality Assessment in Rural Italy*

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Abstract: Rural quality of life in specialised peripheral or non-urban territories depends not only on material conditions, but also on the symbolic and evaluative processes through which rural places become recognisable, credible, and valued in extra-local markets. This paper examines professional wine reviews as observative judgment infrastructures that translate territorial intangibles into market-readable signals, thereby shaping reputational opportunities in fragile rural economies. We use the relatively isolated island of Sicily, Italy, as a case study, focusing on the Etna DOC (the protected origin denomination for wines grown on the slopes of Mount Etna). Drawing on a corpus of 290 professional reviews of Etna DOC wines, we identify two broad families of textual signals: sensory descriptors and place-linked markers. An interpretable dictionary-based approach is combined with OLS regression models including variety fixed effects and heteroskedasticity-robust standard errors to test which territorially anchored linguistic cues are systematically associated with higher ratings, net of sensory text structure. The results show that place-linked language is not uniformly informative. Rock-anchored and maritime or saline markers display positive and statistically robust associations with wine ratings, whereas generic territorial references lose explanatory power once sensory descriptors are taken into account. At a more aggregated level, the intensity of place-linked language remains positively associated with ratings within varietal segments. These findings suggest that evaluative intermediaries contribute to the stabilisation and circulation of territorial reputation, making specialised rural places more visible and intelligible in reputational markets. The paper contributes to current debates on rural sustainability and territorial valorisation by showing how symbolic forms of market mediation can affect the recognition and potential value capture of place-based assets in specialised rural regions.

Keywords: Geographical Indications; Wine Reviews; Judgment Devices; Place-Based Intangibles; Territorial Reputation; Rural Quality of Life; Rural Livability

JEL Codes: R11, L15, L66

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ISSN 1553-0892, 0048-49X (online)
www.srsa.org/rrs

1. INTRODUCTION

Rural quality of life has become a central concern for territorial development, and it cannot be reduced to the material endowment of a place. In many specialised rural territories, whether a community thrives depends just as much on whether its place and its products are seen, trusted, and valued by people far away. This is a question of livability as much as of economics. When a peripheral territory manages to make its distinctiveness legible in extra-local markets, recognition can translate into demand, investment, and a measure of resilience for the people who live there. When it fails to do so, even high-quality production can remain invisible and underpriced. The mechanisms that govern this visibility are therefore not a side issue for rural livability; they are part of its infrastructure. This paper takes one such mechanism, the professional wine review, and asks what it does for a specialised rural wine region. Our case is the Etna DOC, the denomination of controlled origin for wines produced on the volcanic slopes of Mount Etna in eastern Sicily, a territory that combines strong symbolic visibility with the structural fragility typical of a Southern European inner area.

Wine is a useful lens here because its quality is hard to observe before consumption and is communicated, to a large extent, through evaluative texts. Reviews do not simply record what a wine tastes like. They weave sensory description together with geographical references and territorial markers, and in doing so they help fix what a place means in the market. Our interest is in the territorial component of this language and in what it reveals about how rural reputation is built and contested. We pursue two research questions. First, which place-linked territorial signals in professional wine reviews are systematically associated with higher ratings, once the sensory structure of the text and the heterogeneity across grape varieties are taken into account? Second, what does this imply for the construction and contestation of rural territorial reputation, and for the livability of the rural economies that depend on it?

The paper makes three contributions. It advances the understanding of how symbolic and evaluative mechanisms mediate the relationship between territorial identity and market access in specialised rural economies, with the wine sector as a particularly transparent setting. It offers a replicable measurement strategy, grounded in interpretable dictionaries and explicit matching rules, that separates sensory signals from place-linked signals and can be carried over to other territorial contexts and quality categories. And it connects an upstream reputational mechanism to the broader debate on rural livability, showing how evaluative intermediaries help shape the distribution of opportunities and pressures in fragile rural regions without conflating evaluative signals with wellbeing outcomes.

The remainder of the paper is organised as follows. Section 2 develops the notion of rural livability in niche commodity markets and situates wine as a place-based good. Section 3 presents the conceptual framework, beginning with Karpik's account of singularities and judgment infrastructures and extending it to territorial intangibles and to wine reviews specifically. Section 4 describes the study area, the Etna DOC region. Section 5 sets out the corpus, the provenance of the data, the definition of the two signal families, and the inferential models. Section 6 reports the empirical results, organised around the two research questions. Section 7 discusses the findings and their implications for rural livability, and Section 8 concludes.

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2. RURAL LIVABILITY IN NICHE COMMODITY MARKETS

This section develops the notion of rural livability that frames the rest of the paper. Section 2.1 distinguishes the rural from the agricultural and situates specialised quality territories within that broader picture; Section 2.2 reframes livability as a relational and reputational condition that depends on the judgment infrastructures through which territories become recognisable, trustworthy, and valued; and Section 2.3 introduces wine as a place-based good through which these dynamics become empirically observable.

2.1. Beyond the Agricultural Lens

Rural areas are highly heterogeneous and should not be treated as synonymous with agricultural areas alone. Their economic bases may include tourism and recreation, manufacturing, public employment, retirement economies, and, increasingly, remote work, alongside farming and food production. Even so, in some specialised rural territories agri-food activities remain especially important because they connect livelihoods, place identity, cultural recognition, and external market visibility. This is particularly the case where territorially embedded products become part of how rural places are imagined, narrated, and valued beyond the local scale. It is worth recalling, in this respect, that de Noronha Vaz and Nijkamp (2009) describe the food sector as both a container of valuable knowledge and information and a transmitter of creative production processes over time, resting on an established structure of small firms, most of them embedded in local environments. Many traditional rural activities have shown a high transformative capacity in adopting new technical and organisational practices, despite their sometimes peripheral position in national and international markets. With digital technology and advanced logistics, the historic urban–rural dichotomy is diminishing in many countries (Kahsai et al., 2013), and some agri-food producers have become oriented towards supra-regional and international markets through specialisation, segmentation, labelling, and digital marketing. This is especially visible in the wine sector, where market value and territorial reputation are closely intertwined.

Equating rural with agricultural oversimplifies a highly heterogeneous reality. This is evident not only in European debates on territorial development but also in the United States, where rural economies are widely recognised as internally diverse and not reducible to farming alone. European rural areas are likewise differentiated in remoteness, demographic dynamics, service accessibility, and economic opportunities. The Sicilian case examined here is analytically instructive not because it stands for the rural as such, but because it shows how wine, as a place-based product, can become a particularly visible interface between local identity, territorial branding, and external recognition within a specialised rural setting (Jafarli and Canavari, 2025). Besides their often peripheral location, such areas normally have a specific economic, social, or cultural geographical identity, and this identity should not be read as an agricultural identity. In many rural contexts, food production is only one component of a broader territorial configuration. Yet even where farming is not the dominant economic backbone, local food cultures may still play a disproportionate role in shaping collective identity, tourism imaginaries, symbolic recognition, and place attachment. Products such as wine, cheese, or other geographically anchored foods matter, then, not

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because all rural economies are agricultural, but because in some places they concentrate cultural meaning, territorial distinctiveness, and external reputation in particularly visible ways.

2.2. Livability as a Relational and Reputational Condition

Rural quality of life has increasingly served as a lens to interpret rural development beyond growth-centric paradigms. The focus shifts to the capacity of rural territories to sustain desirable living conditions under persistent structural constraints such as remoteness, thin markets, and uneven institutional capacity, including how opportunities, pressures, and value flows are generated, distributed, and reproduced within highly specialised rural economies (Wei et al., 2023). Read through Karpik (2010) insight that markets for singular goods rely on judgment infrastructures to navigate uncertainty, livability can be understood as shaped not only by material conditions but also by the evaluative and symbolic mechanisms through which territories become recognisable, trustworthy, and valued. In this perspective, rural territories themselves function as singularities: their qualities are multidimensional, difficult to observe, and dependent on devices that mediate how they are perceived and judged.

Within these specialised quality territories, a substantial share of value creation hinges on place-based intangible resources, including reputation, recognition, symbolic capital, and shared narratives, which actively shape external demand, investment expectations, and market accessibility (World Intellectual Property Organization, 2021; Castaldi and Mendonça, 2024). Livability, on this account, depends not only on infrastructure and services but also on how the territory is perceived, evaluated, narrated, and made trustworthy, which is why judgment infrastructures become central to determining who captures value locally. In rural contexts, where credibility and intermediation can disproportionately affect distributive outcomes, evidence from value-chain research and geographical indication (GI) systems points to both opportunities, such as price premiums and differentiation, and risks, such as power asymmetries and downstream appropriation (Yang and Renwick, 2019; Cardoso et al., 2022; Lebaron, 2024). Recent quasi-experimental evidence reinforces the point that the territorial protection of a quality product can generate measurable economic effects well beyond the farm gate, including in manufacturing and public employment (Dries, 2026), which is precisely the kind of spillover that links symbolic recognition to lived rural conditions.

2.3. Wine as a Place-Based Good

What makes wine so useful as a place-based economic good is that it is a specific, non-homogeneous, and strongly localised product whose qualities are multidimensional and hard to observe directly before consumption (Charters, 2006; Storchmann, 2012). There is no single objective measure for describing wine quality unambiguously: consumer judgements vary widely, and value is not easily captured in a price. The parameters that shape the consumer value of a wine include colour, taste, vintage, volume of supply, place and mode of production, place image, symbolic authenticity, environmental factors, grape variety, producer image, the label, expert judgements, and marketing (Storchmann, 2012). As an experience

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good, wine depends heavily on mediated evaluative cues, ratings, classifications, reviews, and other judgment devices that translate complex qualities into legible signals (Ashenfelter and Storchmann, 2010). Wine and cheese are well-known examples of place-based foods that, in some rural contexts, carry economic differentiation, cultural identity, and territorial recognition. Their relevance lies not in representing rurality in general but in showing how local food cultures contribute to the broader rural livability puzzle by linking markets, meanings, and place attachment. The quantification of such lifestyle indicators may rest on objectively measured statistical data or on subjective, perceived wellbeing indices (Liu et al., 2024). The marketing of specific rural products calls for identifiers that emphasise their attractive place-specificities, aligning geographical indicators with the quality of the food in that area (Picard et al., 2018)

Contemporary valorisation debates conceive territory not as a passive backdrop but as an active agent in meaning-making, legitimacy-building, and market coordination. Places are constituted through symbolic signalling, rhetorical framing, and institutional devices that render them recognisable and credible across scales (Castaldi and Mendonça, 2024). Territorial branding and storytelling configure stakeholder expectations, reduce market ambiguity, and support legitimacy over time (Maclean et al., 2012; Acharya and Rahman, 2016; Swain et al., 2024). This relationship is neither linear nor uncontested: hybrid organisational forms must navigate competing expectations, balancing distinctiveness and conformity through adaptive narrative strategies (Gauthier et al., 2024). In thin and highly intermediated rural markets, expert evaluations function as pivotal valuation mechanisms. Evidence from agri-food valorisation shows how territorialisation and certification through geographical indications can raise market visibility, prices, and local incomes (Barham, 2003; Bowen, 2010; Belletti et al., 2017; FAO and EBRD, 2018; Food and Agriculture Organization of the United Nations, 2023). Research on the global wine sector shows, conversely, that entrenched reputation regimes privilege established terroirs while marginalising emerging regions (Overton et al., 2012; Rainer and Steiner, 2024), with sensory and territorial narratives further shaping evaluative outcomes (Picard et al., 2018; Spence, 2019). These dynamics bear directly on rural livability: territorial specificity can generate quality premiums and community resilience, while a lack of recognition can deepen economic precarity and social fragmentation (Donner et al., 2017). Wine, in this sense, does not constitute a singularity in itself; it operates as a carrier of territorial singularity, with judgment infrastructures translating rural territorial qualities into market value.

3. VALUING SINGULARITIES: JUDGMENT INFRASTRUCTURES AND TERRITORIAL INTANGIBLES

This section sets out the conceptual framework that links territorialised intangible resources, judgment infrastructures, and the textual signals embedded in professional wine reviews. The aim is to specify how these mechanisms can be defined analytically and operationalised empirically. We begin with the account of singularities and judgment infrastructures on which the rest of the framework rests.

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3.1. Singularities and Judgment Infrastructures

The analysis builds on Lucien Karpik's economics of singularities (Karpik, 2010), originally published as *Karpik (2007)*. Karpik is concerned with a class of goods that standard market theory handles poorly: goods that are multidimensional, incommensurable, and of uncertain quality, such as wines, books, films, lawyers, or restaurants. These goods are singular in the sense that they cannot be ranked along a single agreed scale, and their quality cannot be fully known before consumption. Coordination in such markets does not run on price alone. It depends on what Karpik calls judgment devices, or dispositives, the instruments that help buyers form an opinion and choose under genuine uncertainty. Guides, rankings, critics, awards, appellations, and expert reviews are all examples. They work by reducing opacity, by embedding a singular good within a shared interpretive frame that makes it comparable to others, and by lending credibility to the qualities they attribute to it.

Two features of this account matter for our purpose. First, judgment devices are not neutral mirrors of an underlying quality. They are active: they organise attention, they make some attributes visible and push others into the background, and in doing so they help constitute the value they claim merely to report e(Esposito and Stark, 2019). Second, the same logic that Karpik develops for singular goods can be extended to singular places. A territory, like a wine, is a multidimensional object whose qualities are difficult to standardise and whose valuation depends on devices that orient judgment. Rural territories can therefore be treated as singularities in Karpik's sense, and the instruments that evaluate their products, professional wine reviews among them, can be read as judgment infrastructures that stabilise and circulate territorial meaning. This is the move that allows us to connect a body of evaluative text to the broader question of how rural reputation is made. We use the term judgment infrastructure rather than judgment device when we wish to stress the durable, repeated, and quasi-institutional character of these instruments, which is what gives them traction over time in a reputational market.

3.2. Territorial Intangibles and Place-Based Reputation

The second building block is the notion of place-based intangibles, which treats territorial reputation and recognition as analytical resources that contribute to the economic valorisation of rural territories. This perspective builds on traditions that interpret territorial advantages as combinations of material and immaterial resources that are geographically anchored and difficult to replicate (Storper, 1997; Scott, 1999; Camagni, 2008). Such resources have the properties of intangible assets, economic value and strategic relevance, but their effectiveness depends on their association with a shared territorial referent: a common and contestable set of meanings, legitimacy claims, and place signals mobilised across institutional and market arenas (Pike, 2011; Hoppe and Nedzhvetskaya, 2024; Castaldi and Mendonça, 2024). Place, in this framing, enters valorisation not as a descriptive backdrop but as a structuring device that shapes how quality is interpreted, qualified, and communicated.

In specialised rural territories, the relevance of these intangibles is heightened by thin markets and by informational and power asymmetries along value chains. The territorial

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anchoring of quality can open access to premium channels and enhance attractiveness, but it can equally amplify pressures and trade-offs, including dependence on gatekeepers, the polarisation of surplus, and vulnerability to reputational shocks, with direct implications for rural livability (Uyarra, 2019; Willett, 2023). Crucially, territorial reputation and recognition are not reducible to firm-level attributes. They rest on shared meanings, institutional qualification regimes, and collective legitimation practices (Granovetter, 1985; Bourdieu, 1986; Acharya and Rahman, 2016; Vuignier, 2017; Swain et al., 2024). Tensions emerge around the definition of symbolic boundaries, the control of authenticity and quality criteria, the appropriation and distribution of reputational surplus, and the institutional capacity to prevent rentier capture and selective value intermediation (Macías Vázquez and Saavedra Gallo, 2021; Castaldi and Mendonça, 2024). This is one reason why rural livability enters our analysis as an interpretive horizon rather than as a directly measured outcome: the same symbolic mechanisms that enhance market recognition may produce uneven territorial outcomes depending on who can appropriate and stabilise those meanings.

In quality agri-food systems, place-association is typically institutionalised through formal collective qualification devices, geographical indications, intellectual property instruments, and labelling regimes, which provide codified frameworks for territorial reputation and support differentiation and appropriability while generating distributive tensions (Cant, 2015; Calboli, 2021). These institutional devices operate alongside non-institutional, market-based judgment infrastructures such as expert reviews and ratings, which are not formally regulated yet play a central role in how territorial qualities are interpreted, circulated, and hierarchised. The cultural and social capital embedded in these systems further shapes attractiveness, market access, and place-making capacity in specialised rural contexts (Bourdieu, 1986; Emery and Flora, 2006; Flora and Flora, 2008; Lebaron, 2024).

3.3. Wine Reviews as Judgment Infrastructures

This point is particularly important for wine. As a singular and experience-based good, wine cannot be fully evaluated before consumption, and market coordination therefore relies on transferable judgment systems (Karpik, 2010). Reviews, rankings, classifications, and expert commentaries translate hard-to-observe qualities into comparable signals while also organising product identifiers and review imaginaries. Evidence from agri-food valorisation shows that territorial reputation depends on more than production attributes, and that evaluative intermediaries play a crucial role in extending recognition beyond local settings (Barham, 2003; Bowen, 2010; Charters and Spielmann, 2014; Menival and Charters, 2014; Belletti et al., 2017). The Bordeaux case is instructive: the 1855 classification, a codified reputational hierarchy, explains price variation more reliably than intrinsic quality indicators (Ginsburgh et al., 2013), which shows how value is stabilised through layered judgment devices in which formal classifications, expert discourse, and symbolic territorial cues interact.

Professional wine reviews are therefore treated here not only as evaluative texts but as lexical devices through which place identity, product identifiers, and broader review imaginaries become market-readable. They do not merely describe organoleptic characteristics. They knit together sensory descriptors, geographical references, territorial markers, and environmental or cultural signifiers in ways that construct recognisable place-images and

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product identities, mediating between territorially anchored qualities and extra-local systems of recognition. They also follow strong genre conventions, which shape vocabulary and evaluative style (Cadot et al., 2012; Paradis and Eeg-Olofsson, 2013); acknowledging these conventions does not weaken the analysis but clarifies the interpretive boundaries within which textual signals operate.

A key implication for empirical design follows. Place-based intangibles are not directly observable as a single variable. They become tractable through the discursive and evaluative infrastructures that stabilise place meanings and render them transferable across audiences. In reputational markets, judgment devices reduce quality uncertainty and render singular goods comparable, thereby contributing to fixing the economic meaning of places (Karpik, 2010), and evaluation operates as an institutional technology that stabilises and circulates the value of territorial referents, making a set of place-based associations market-readable (Adler, 2024). On this basis we adopt a measurability-oriented model that translates these mechanisms into observable constructs. Ratings are treated as proxies for perceived quality, and review texts as traces of territorially anchored reputational processes. Operationally, we distinguish sensory signals (organoleptic and stylistic descriptors) from place-linked signals (geographical denominations and territorial markers). The empirical expectation is stated in associative and differential terms: controlling for sensory text structure, place-linked components more clearly anchored to the territorial referent will be systematically associated with top-tier evaluations, while more generic or portable enological register components will lose informational capacity once sensory content is isolated. This strategy is implemented through interpretable dictionaries and replicable matching rules, privileging transparency and construct validity.

4. STUDY AREA: THE ETNA DOC WINE REGION

The empirical setting of this study is the Etna DOC, the denomination of controlled origin (Denominazione di Origine Controllata) for wines produced on the slopes of Mount Etna, the active volcano that dominates the eastern coast of Sicily. Established in 1968, the Etna DOC is one of the oldest denominations in Italy and the first in Sicily, although the region's contemporary prominence in the fine-wine market is far more recent. The denomination covers red, white, rosé, and sparkling wines. Red and rosé Etna wines are based on the native Nerello Mascalese grape, complemented by Nerello Cappuccio, while the whites are built around Carricante. These varieties, and the volcanic environment in which they grow, give Etna wines a distinctive profile that the international wine press has come to associate with freshness, structure, and a marked mineral character.

The viticultural landscape of Etna is unusual and helps explain why territorial language is so prominent in its reviews. Vineyards climb the volcano in a near-continuous arc, in places above one thousand metres, on soils formed from successive lava flows, volcanic ash, and weathered basalt. The growing area is conventionally described in terms of four versanti, the northern, eastern, south-eastern, and south-western flanks of the mountain, each with its own exposure, altitude range, and soil history, and is further subdivided into named contrade, small territorial units that function in a manner comparable to the crus of Burgundy. Many vineyards are old, terraced, and planted with ungrafted, free-standing bush vines that

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survived phylloxera, a heritage that producers and critics alike mobilise as a marker of authenticity. The result is a territory whose internal differentiation is unusually legible and whose identity is strongly tied to physical and environmental features: rock, lava, altitude, and the proximity of the sea.

In socio-economic terms, the Etna area shares many traits of a Southern European inner area. The production structure is fragmented and dominated by small and very small estates, alongside a smaller number of larger and more export-oriented houses, and the territory has experienced the demographic and service pressures typical of peripheral rural Italy. Against this backdrop, the rise of Etna as a recognised quality region over the past two decades has been rapid, driven in part by external investment and in part by the work of a local collective actor, the Consorzio di Tutela dei Vini Etna DOC, which coordinates protection and promotion of the denomination. This combination of strong symbolic visibility and structural rural vulnerability is what makes Etna an instructive lens for examining how judgment infrastructures operate in specialised rural economies, and why the construction of territorial reputation here is not a purely commercial matter but one with consequences for local livability (Privitera et al., 2025).

5. DATA AND METHODS

This section sets out the empirical strategy. Section 5.1 describes the corpus, its provenance, and the unit of analysis; Section 5.2 defines the two families of textual signals, sensory and place-linked, and how they are measured; and Section 5.3 specifies the pre-processing, the regression models, and the inferential scope within which the results should be read.

5.1. Corpus, Provenance, and Unit of Analysis

The analysis draws on a corpus of 290 professional reviews of Etna DOC wines, each associated with a numerical rating on a 100-point scale. The reviews are drawn from the tasting database of *Wine Enthusiast*, an international wine publication, and were authored by the magazine's dedicated reviewer for Italian wines. Holding the critic constant across the corpus removes inter-reviewer variation, but it also means that reviewer fixed effects cannot be estimated, a limitation we return to below. The wines span vintages from 1994 to 2016, with the large majority concentrated between 2006 and 2016, a window that coincides with the period in which Etna consolidated its international reputation. Scores range from 82 to 95 points (mean 89.82), and the texts are short, with a median of 40 and a mean of 41.3 words. The reviews cover the full stylistic range of the denomination, with red and rosé wines based on Nerello Mascalese, white wines based on Carricante, and a smaller number of blends and sparkling wines, yielding 13 variety levels in total.

The review document is adopted as the unit of analysis because, in reputational markets, professional reviews function as judgment devices that reduce quality uncertainty and render singular goods comparable through shared evaluative grids (Karpik, 2010). Consistent with the place-based intangibles framework, review texts are treated as observable traces of territorially anchored reputational processes through which place associations are stabilised and made transferable across extra-local arenas (Adler, 2024; Castaldi and Mendonça, 2024). In

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line with the rural livability framing, the focus is on this upstream channel, that is, on how evaluative signals shape opportunities and pressures in specialised rural territories, without assuming any direct measurement of downstream livability outcomes (Uyarra, 2019; Willett, 2023).

Because the reviews are short, a few concrete examples make the coding strategy transparent. Table 1 reproduces three reviews from the corpus, all from top-rated wines, together with the dictionary categories that each one activates. The examples were chosen to illustrate the two place-linked markers that the analysis will identify as the most informative, rock-anchored language (flint, mineral) and maritime or saline language (saline), and to show that these markers appear embedded within rich, conventional sensory description rather than in isolation.

Table 1: Illustrative Reviews from the Corpus and the Dictionary Categories They Activate.

Review (excerpt)	**Score**	**Variety**	**Place-Linked Signals**	**Sensory Signals**
"This stunning, full-bodied wine is in the running as one of the best white wines in Italy. It's perfumed with acacia flower, Spanish broom, beeswax, flint and tree fruit. The delicious palate delivers green apple, Anjou pear and mineral sensations of mesmerizing depth. [. . .]"	95	Carricante	Rock-anchored (flint; mineral)	Floral (acacia flower; broom); Fruit (tree fruit; green apple; pear); Body/structure (full-bodied)
"Pressed wild flower, hay, fennel and ripe berry scents mingle together in the glass. The refreshing palate combines crushed strawberry, juicy red cherry, saline and a hint of baking spice alongside bright acidity."	90	Nerello Mascalese	Maritime/saline (saline)	Floral (wild flower); Earth/herbal (hay; fennel); Fruit (berry; strawberry; cherry); Spice (baking spice); Acidity/freshness (bright acidity)
"This gorgeous wine opens with aromas of smoke, baking spice, red berry and flint. The mineral note carries over to the vibrant, silky palate, accenting juicy Morello cherry, white pepper, star anise, Mediterranean herb and tobacco. Polished tannins and fresh acidity provide impeccable balance. [. . .]"	95	Red Blend	Rock-anchored (flint; mineral)	Spice (baking spice; white pepper; star anise); Fruit (red berry; Morello cherry); Earth/herbal (Mediterranean herb; tobacco); Tannin (polished tannins); Acidity/freshness (fresh acidity)

Note: Review texts are quoted from the source database.

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5.2. Signal Families: Sensory and Place-Linked

The measurement strategy distinguishes two families of co-present signals. Sensory signals capture organoleptic and stylistic description, that is, aromatic profile, structure, texture, and gustatory dynamics. They are constructed through a dictionary organised into categories consistent with the tasting-note register, including fruit, floral, spice, earth and herbal notes, oak and vanilla, acidity and freshness, body and structure, tannin, and finish, which enables a transparent quantification of what is described at the sensory level.

Place-linked signals capture place-association through geographical references, territorial markers, and environmental or identity signifiers, consistent with the view that territorial reputation depends on anchoring to a geographically situated common referent (Castaldi and Mendonça, 2024). These signals are not treated as a single block. They are articulated into distinct components that separate explicit territorial markers, such as toponyms and direct place references (the Etna or locality category), from more transferable enological lexicon (such as mineral proxies) and, specific to the Etna case, from volcanic and environmental evocations. Concretely, the place-linked dictionary distinguishes direct place naming (Etna and locality), rock-anchored language (terms such as stone, rock, flint, and slate), maritime or saline language (terms such as saline, salt, and sea), mountain and altitude terrain, a volcanic core (lava, ash, volcanic), and references to volcanic soils. This articulation makes it possible to test which components retain informational capacity once sensory text structure is controlled for, consistent with reading reviews as judgment infrastructures that encode and render communicable place-based meanings (Karpik, 2010; Adler, 2024).

At the operational level, document-level measures are computed for each sensory category and each place-linked component on the basis of occurrence counts, normalised as rates per 100 words to adjust for variation in review length. This normalisation preserves an ordered interpretation, from absence through presence to higher intensity, while ensuring comparability across texts of different lengths.

5.3. Pre-Processing, Models, and Inferential Scope

Perceived quality is operationalised through the numerical rating associated with each review, treated as a continuous outcome variable. The distribution of scores is concentrated in the upper range of the scale, reflecting well-documented grade-inflation dynamics in professional wine criticism (Ashenfelter and Storchmann, 2010; Masset and Weisskopf, 2016). The main analysis therefore models the continuous rating directly, while a complementary logistic specification on a top-tier binary indicator, distinguishing an excellence segment from the rest of the distribution, is used as a robustness check; the threshold is defined on substantive grounds and verified against alternative plausible cut-offs.

Review texts are subjected to conservative pre-processing aimed at improving matching accuracy while preserving the interpretability of enological language, including normalisation through lowercasing, removal of non-informative characters, and whitespace standardisation. Throughout, we privilege an interpretable text-analytics approach based on explicit dictionaries and matching rules, so that every detected signal is traceable to specific terms or patterns and is therefore inspectable and contestable (Manning and Schütze, 1999; Souza Gon-

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zaga et al., 2019; Grimmer et al., 2022). This keeps the link between theoretical constructs and empirical operationalisation transparent and verifiable.

The association between textual signals and ratings is estimated through OLS regression with heteroskedasticity-consistent (HC1) robust standard errors, modelling the continuous rating as a joint function of sensory signals and place-linked components. Estimating the two families jointly mirrors the structure of the evaluative act itself, in which sensory description and place references are co-produced, and it allows us to assess whether place-linked components retain informational relevance net of sensory text structure. Our reference specification adds variety fixed effects to account for structural heterogeneity across grape varieties, since a meaningful share of rating variability is linked to variety. To reduce sparsity across individual place-linked markers and test the stability of the territorial signal as a whole, we also estimate an aggregated specification that sums place and sensory signals into composite intensity indices, again with variety fixed effects. The full comparison between the baseline and the variety-fixed-effects specifications, and between the disaggregated and aggregated models, is reported in Appendix A; the main text concentrates on the reference specifications and on the findings that speak to the research questions.

Inferential claims are delimited deliberately. The analysis is associative rather than causal, since text and rating are co-produced in the same editorial and evaluative act, and reverse directionality is plausible: reviews of wines already judged excellent may be more elaborate, both sensorially and in place-linked terms. The corpus reflects the selection and stylistic conventions of a single publication and a single critic, which precludes reviewer fixed effects. We make this scope explicit once, here, and read the coefficients throughout as conditional associations, that is, as evidence on whether place-linked components retain informational relevance net of sensory structure, not as causal effects.

6. EMPIRICAL RESULTS

This section reports the empirical findings, organised around the two research questions. We first establish the descriptive profile of the corpus and the dictionary coverage, then answer the first research question by examining which place-linked markers are associated with ratings once sensory structure and variety are accounted for, and finally draw out what the pattern implies for the second research question, which we develop more fully in the discussion. Throughout, we report the reference specifications; the model-by-model comparison is collected in Appendix A.

The corpus comprises 290 reviews, with scores concentrated in the upper range of the scale and relatively short texts (Table 2). Because the dataset includes a single critic, reviewer fixed effects cannot be estimated, so variety fixed effects across 13 levels serve as the main structural control. The concentration of scores in the upper range reflects the compression typical of professional wine ratings (Masset and Weisskopf, 2016), which limits score variance and constrains the statistical power of text-based associations, a context worth keeping in mind when reading the effect sizes below.

Dictionary coverage reveals a marked asymmetry between the two signal families (Figure 1). Sensory signals are highly prevalent across the corpus, while place-linked categories

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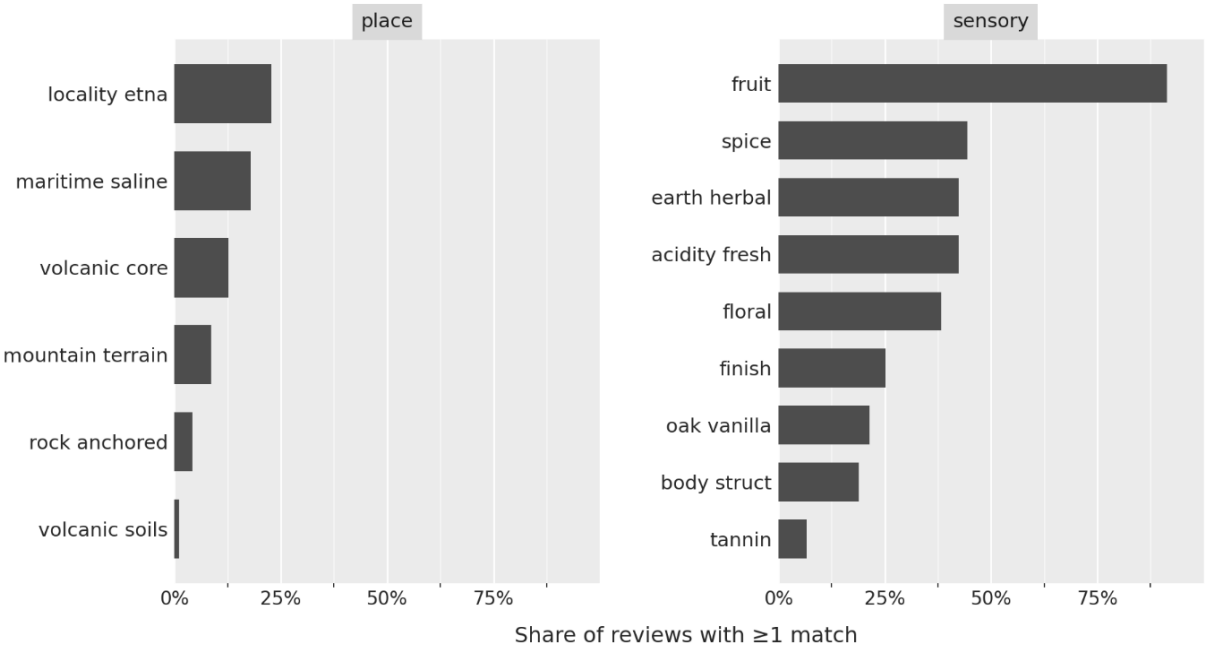
Table 2: Corpus Descriptives (Etna Reviews)

N Reviews	Points (Mean)	Points (Min–Max)	Words/Review (Median)	Words/Review (Mean)	Variety Levels	Taster Levels
290	89.82	82–95	40	41.3	13	1

Note: Words are computed as non-empty tokens in the review text.

are rarer and more concentrated. Direct place references and some environmental markers, notably maritime or saline language, appear most frequently, whereas more specific categories such as volcanic soils are extremely sparse. This profile is analytically consequential: rare signals produce less precise estimates and wider confidence intervals, which directly informs how the model results should be read.

Figure 1: Coverage by Dictionary Category



Note: Share of reviews with at least one match, for place-linked categories (left) and sensory categories (right).

6.1. Which Territorial Signals Are Associated with Higher Ratings (RQ1)

Table 3 reports the place-linked coefficients in the reference specification, which includes both signal families and variety fixed effects. The answer to the first research question is clear and selective. Place-linked language does not behave as a homogeneous block. Two components retain a positive and statistically distinguishable association with ratings: rock-anchored language and maritime or saline language. Concretely anchored references to the physical and environmental character of the territory carry information about perceived quality, whereas the remaining place-linked markers do not. The instability of the Etna or locality marker is especially telling. Despite its high coverage, direct place naming does not by itself predict higher ratings once other signals are accounted for, which implies that

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it is the quality of territorial anchoring, its specificity and legibility, rather than the mere presence of a place name, that matters.

Table 3: Place-Linked Coefficients in the Reference Model

Place-Linked Component	Estimate (SE)	p
Rock-anchored	0.417 (0.181)	0.022*
Maritime/saline	0.279 (0.108)	0.010*
Mountain terrain	0.143 (0.269)	0.595
Etna/locality	0.089 (0.178)	0.618
Volcanic core	−0.021 (0.163)	0.898
Volcanic soils	−0.573 (0.694)	0.410

Note: Sensory and place-linked signals with variety fixed effects, HC1 robust standard errors. Coefficients are points per +1 match per 100 words. * p < 0.05.

The sensory side of the same model behaves as expected for the genre (Table 4). Associations are moderate, consistent with the compressed score distribution and with the fact that standard sensory description characterises the register without strongly differentiating within the top end of the scale. The strongest positive correlate is body and structure, while tannin, oak and vanilla, and fruit carry negative associations, suggesting that more structured and less oak-forward or fruit-driven profiles tend to be rewarded in this corpus. The point of reporting the sensory block is not to interpret each descriptor in isolation but to show that the place-linked associations in Table 3 hold net of a rich and conventional sensory vocabulary.

Table 4: Top Sensory Correlates in the Reference Model, Selected by Absolute Coefficient Magnitude

Sensory Component	Estimate (SE)	p
Body/structure	0.556 (0.117)	0.000***
Tannin	−0.457 (0.178)	0.011*
Spice	0.213 (0.068)	0.002**
Oak/vanilla	−0.138 (0.057)	0.016*
Fruit	−0.137 (0.059)	0.021*
Earth/herbal	−0.098 (0.070)	0.162
Acidity/freshness	0.087 (0.066)	0.187
Finish	0.086 (0.128)	0.503

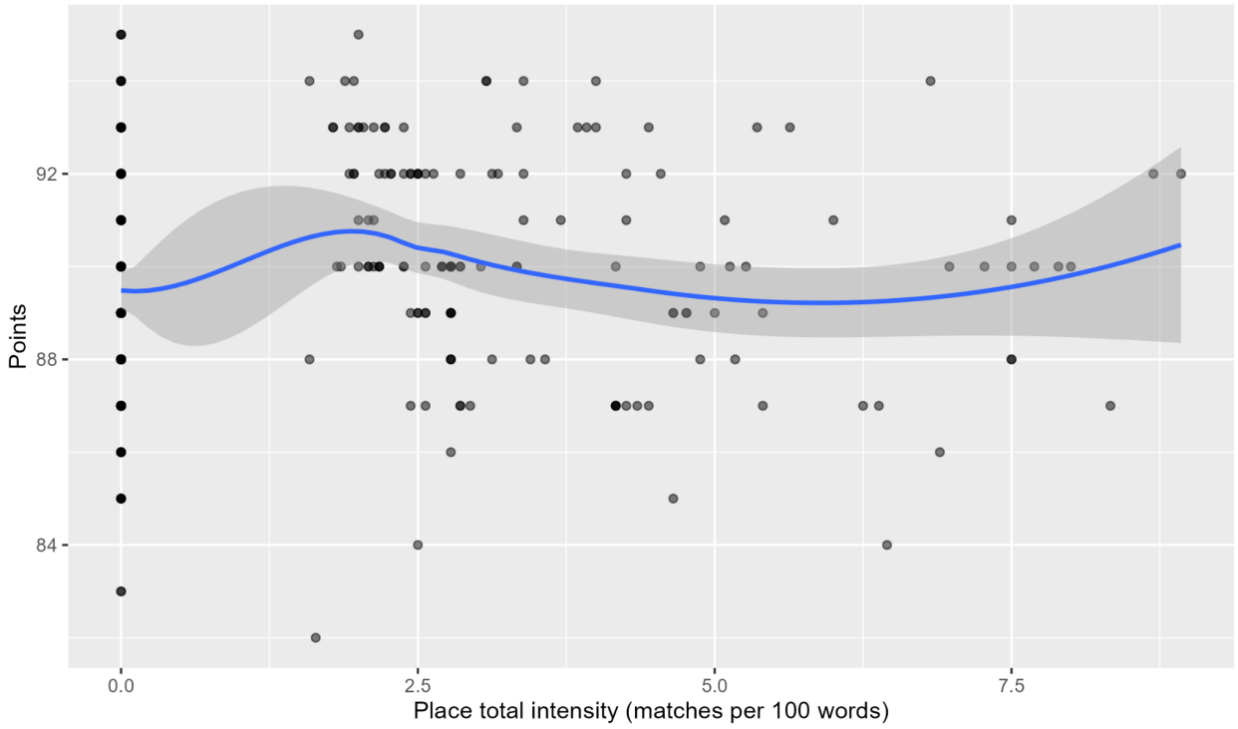
Note: HC1 robust standard errors. Coefficients are points per +1 match per 100 words. * p < 0.05, ** p < 0.01, *** p < 0.001.

The same conclusion holds when the individual markers are collapsed into composite intensity indices. In the aggregated specification with variety fixed effects, the place-intensity

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index becomes positive and significant (place index $\beta = 0.165$, 95% CI [0.019, 0.311], $p = 0.028$), while the sensory index remains non-significant ($\beta = 0.033$, $p = 0.172$). Controlling for grape variety, in other words, a more place-intensive review language is associated with higher ratings. Figure 2 plots ratings against aggregated place-linked intensity together with a LOESS smoother. The scatter is dispersed and the smoother is non-linear, which is a useful reminder that the positive association is a property of the aggregated model with variety fixed effects rather than of a simple bivariate trend in the raw data: only once grape variety is held constant does the place-intensity index turn positive and significant. A complementary logistic specification on a top-tier binary outcome confirms the direction and relative stability of these findings.

Figure 2: Ratings against Aggregated Place-Linked Intensity, Shown with a LOESS Smoother



Note: Matches per 100 words. The smoother traces the local, non-linear pattern in the raw data; the positive and significant association is the one recovered by the aggregated linear model with variety fixed effects (Table A3), not a straight fit through this scatter.

6.2. From signals to reputation (RQ2)

Taken together, these results give a direct answer to the first research question and set up the second. The territorial signals that travel best in this judgment infrastructure are the concrete, physically anchored ones, not generic place naming. That selectivity is itself the bridge to the second research question. If only some territorial cues are rewarded, then the

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reputational benefit of place-linked language is not available to all producers or all parts of the territory in equal measure, and the way reputation is constructed through reviews carries distributive implications for the rural economy that produces the wine. We develop this argument, and its connection to rural livability, in the discussion that follows.

7. DISCUSSION

The results support a simple but consequential proposition: professional wine reviews work as judgment devices not only for describing sensory qualities but for rendering territorial intangibles market-readable through recognisable and relatively standardised linguistic markers (Karpik, 2010; Adler, 2024). Certain place-linked references are associated with perceived quality even after sensory structure and variety are controlled for, and, crucially, not all territorial signals behave alike. Markers tied to the physical and environmental character of the territory, rock-anchored and maritime or saline language, prove more informative than generic volcanic evocations or very sparse categories. This is coherent with the place-based intangibles framework. What appears to matter for evaluative outcomes is the quality of territorial anchoring, its specificity and legibility within the tasting-note genre, rather than the mere presence of place references (Castaldi and Mendonça, 2024).

The fact that the aggregated place index emerges more clearly once variety fixed effects are introduced adds an important layer. Grape variety acts as a background factor that partly masks the territorial signal; once it is held constant, the contribution of territorial language becomes visible. The practical reading is that place-linked language differentiates perceived quality within comparable varietal segments rather than across wine types. This is where the connection to rural livability becomes concrete, and it deserves to be stated plainly rather than left as an aside. The reputational premium associated with territorial language is not uniformly distributed across the region. It is conditioned by the varietal structure of production, which means that producers working with the varieties and styles that the evaluative register already favours are better placed to convert territorial language into recognition than those who are not. In a territory as internally differentiated as Etna, with its distinct versanti, contrade, and altitudes, this is not a neutral observation. It implies that the gains from a rising territorial reputation may accrue unevenly, following the contours of who can credibly mobilise the most rewarded cues.

This is the sense in which evaluative mechanisms plausibly feed into livability, and it is worth being precise about the causal status of the claim. We do not, and with these data cannot, measure livability outcomes directly. What we can say is that reviews sit upstream of the channels that matter for a rural economy. They shape visibility and access to premium markets, they orient the attention of buyers and gatekeepers, and they help decide which places and which producers become legible to extra-local demand. To the extent that recognition translates into demand, price, and investment, and the evidence from geographical-indication systems suggests that it often does (Bowen, 2010; Belletti et al., 2017; FAO and EBRD, 2018), the way reviews construct territorial reputation becomes one of the conditions under which a specialised rural territory can or cannot capture value from its intangible assets. The link to livability is therefore mediated and probabilistic, not mechanical, but it is real, and treating it as merely interpretive understates what is at stake.

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Two further considerations sharpen this argument. The first concerns who benefits. Enhanced territorial reputation does not reward all local actors equally. A premium that is captured downstream, by merchants, négociants, or non-local owners, looks very different from the point of view of rural livability, from one that reaches the growers and small estates that hold the land and carry the cultural memory of the place. Within Etna, the asymmetry runs along several lines at once: between core and peripheral contrade, between the more and less celebrated versanti, and between established houses with the communicative capacity to engage evaluative intermediaries and small artisans without it. The risk, well documented in the literature on value chains and symbolic commons, is that reputational surplus is appropriated by those already best positioned within the chain, leaving the originators of territorial value with the labour but not the rent (Macías Vázquez and Saavedra Gallo, 2021; Lebaron, 2024). At the same time, recent quasi-experimental evidence on the Champagne appellation shows that the territorial protection of a quality wine can generate positive economic spillovers reaching beyond the wine sector into the wider local economy, including agriculture, manufacturing, and public employment (Dries, 2026). The distributive outcome is thus not predetermined; it depends on how the territorial reputation is governed and on whether local actors have the institutional and communicative capacity to share in it.

The second consideration is temporal. Our corpus is a cross-section, yet territorial reputation is inherently dynamic, and this is especially true for an emerging region. Etna's standing in the international press rose sharply over the period our reviews span, and the vocabulary through which the territory is described, the very markers we measure, is itself part of that history rather than a fixed backdrop. Reputational signals are learned, repeated, and consolidated over time; a cue that is distinctive today may become a generic convention tomorrow as more producers and critics adopt it. A snapshot can show which signals are rewarded at a given moment, but it cannot trace how a region acquires, stabilises, or loses its evaluative grammar. For emerging regions in particular, this trajectory is where much of the action lies, and following it over time, ideally across multiple critics and publications, is a natural and important extension of the present work.

Several caveats define the boundaries of these claims, and we state them once rather than reiterating them throughout. The analysis is associative: text and rating are co-produced in the same editorial act, and reverse directionality remains plausible, since reviews of wines already judged excellent may carry richer place-linked language as a consequence rather than a cause of the high evaluation. Dictionary performance depends on its fit with the genre and on the trade-off between specificity and frequency, so that very rare categories yield unreliable estimates while overly broad ones risk conflating territorial and sensory dimensions. The single-critic structure precludes controls for reviewer heterogeneity. None of this negates the findings. A descriptive, associative design that documents robust co-variations is informative in its own right, and the patterns reported here are stable across specifications. Two extensions would strengthen the construct validity of the place-linked markers: keyword-in-context analysis with a controlled expansion of the volcanic and territorial lexicon of Sicily, carefully insulated from sensory descriptors, and the integration of editorial controls such as text length, vintage, and producer information where these can be recovered (Paradis and Eeg-Olofsson, 2013).

Stepping back, the broader insight is that evaluative infrastructures do not merely de-

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scribe wines. They participate in constructing the territorial meanings through which rural places become visible, comparable, and valued in extra-local markets. Reviews translate reputation, authenticity, recognition, and place legibility into forms that circulate far beyond the territory, and in doing so they help decide which rural places are seen at all. That is why the way these infrastructures represent and rank rural territories belongs on the agenda of rural development, alongside the more familiar concerns of infrastructure, services, and demographic balance.

8. CONCLUSION

Rural areas provide a bundle of goods, from environmental and wellness goods to leisure and agricultural goods. This mixed package offers considerable development potential, provided that high quality is ensured and supported by a reliable assessment infrastructure. This paper has examined how professional wine reviews in an isolated territory operate not only as synthetic quality signals but as discursive infrastructures that translate territorial intangibles, reputation, authenticity, recognition, and place legibility, into forms that circulate across extra-local arenas. Reviews were conceptualised, following our framework, as judgment devices that reduce uncertainty and render singular goods comparable while compressing multidimensional qualities into scalable evaluative formats (Karpik, 2010; Pike, 2011; Adler, 2024; Castaldi and Mendonça, 2024). This dual role is central to understanding how reputational value is constructed and stabilised in specialised rural territories, with consequences for both the opportunities and the pressures that shape local development.

On the first research question, we developed two interpretable and replicable textual constructs aligned with the tasting-note genre, sensory signals and place-linked signals, and articulated the latter into components that distinguish direct place references from territorially anchored environmental markers. The results show that place-linked language does not operate as a homogeneous block. Only territorially anchored markers, rock-anchored and maritime or saline, retain a positive association with ratings once sensory structure and variety are controlled for, while rarer or more ambiguous categories yield imprecise estimates. Aggregated into a composite index, the territorial signal is most visible in the specification with variety fixed effects, which indicates that territorial language differentiates perceived quality primarily within varietal segments. On the second research question, this selectivity is what carries the reputational and distributive weight: because only some cues are rewarded, the benefit of territorial language is unevenly available across producers and parts of the territory, which is the mechanism through which judgment infrastructures stabilise and circulate place-based associations and, in doing so, shape who can capture value locally.

These findings suggest that the policy relevance of territorial reputation cannot be reduced to the formal protection of place-based products through instruments such as geographical indications alone. If territorial reputations are co-produced through institutions, narratives, evaluative devices, and circuits of recognition, then policy must go beyond supporting agricultural production and address the broader conditions under which territorial value becomes legible, credible, and distributable. This implies institutional recognition frameworks capable of stabilising the link between product and place without reducing that link to a purely legal label; reputational infrastructures that raise the visibility of rural ter-

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ritories within evaluative markets through specialised media, digital platforms, experiential circuits, and territorial storytelling; and local capacity-building that strengthens the organisational, communicative, and digital capabilities of local actors, so that reputational value is not captured only by those already best positioned within the chain. A coherent place-based strategy should also coordinate across agriculture, tourism, culture, and landscape governance, and attend to distributive effects, since symbolic valorisation can produce not only new opportunities but also exclusion, dependence on intermediaries, and unequal appropriation of benefits. The central policy issue, in the end, is not simply how to promote a local product, but how to govern the conditions under which territorial reputation is constructed, made credible, and converted into more widely shared territorial gains. Monitoring how judgment infrastructures represent and rank rural territories should therefore be treated as a component of integrated rural development strategies, alongside more conventional indicators of livability and cohesion (Emery and Flora, 2006; Pertoldi et al., 2022). Because territorial reputation is not fixed but acquired, stabilised, and at times eroded over time, a natural next step is to trace how these evaluative grammars evolve across vintages, critics, and publications, so that the longitudinal dynamics through which an emerging rural region moves from invisibility to recognition can be observed directly rather than inferred from a single cross-section.

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REFERENCES

Acharya, Alok and Zillur Rahman. (2016) "Place Branding Research: A Thematic Review and Future Research Agenda," *International Review on Public and Nonprofit Marketing*, 13(3), 289–317. http://doi.org/10.1007/s12208-016-0168-2.

Adler, Patrick. (2024) "Brand on the Run: Place Brands as Judgement Devices and Sources of Local Advantage in the Music Industry," *Regional Studies*, 58(10), 1904–1920. http://doi.org/10.1080/00343404.2024.2306326.

Ashenfelter, Orley and Karl Storchmann. (2010) "Using Hedonic Models of Solar Radiation and Weather to Assess the Economic Effect of Climate Change: The Case of Mosel Valley Vineyards," *The Review of Economics and Statistics*, 92(2), 333–349. http://doi.org/10.1162/rest.2010.11377.

Barham, Elizabeth. (2003) "Translating Terroir: The Global Challenge of French AOC Labeling," *Journal of Rural Studies*, 19(1), 127–138. http://doi.org/10.1016/S0743-0167(02)00052-9.

Belletti, Giovanni, Andrea Marescotti, and Jean-Marc Touzard. (2017) "Geographical Indications, Public Goods, and Sustainable Development: The Roles of Actors' Strategies and Public Policies," *World Development*, 98, 45–57. http://doi.org/10.1016/j.worlddev.2015.05.004.

Bourdieu, Pierre. (1986) "The Forms of Capital," In Richardson, John G., ed., *Handbook of Theory and Research for the Sociology of Education*. Greenwood: New York, pp. 241–258.

Bowen, Sarah. (2010) "Embedding Local Places in Global Spaces: Geographical Indications as a Territorial Development Strategy," *Rural Sociology*, 75(2), 209–243. http://doi.org/10.1111/j.1549-0831.2009.00007.x.

Cadot, Yves, Soline Caillé, Alain Samson, Gérard Barbeau, and Véronique Cheynier. (2012) "Sensory Representation of Typicality of Cabernet Franc Wines Related to Phenolic Composition: Impact of Ripening Stage and Maceration Time," *Analytica Chimica Acta*, 732, 91–99. http://doi.org/10.1016/j.aca.2012.02.013.

Calboli, Irene. (2021) "Geographical Indications Between Intellectual Property and Development," In Calboli, Irene and Wee Loon Ng-Loy, eds., *Geographical Indications at the Crossroads of Trade, Development, and Culture*. Cambridge University Press: Cambridge, pp. 3–24.

Camagni, Roberto. (2008) "Regional Competitiveness: Towards a Concept of Territorial Capital," In Capello, Roberta, Roberto Camagni, Barbara Chizzolini, and Ugo Fratesi, eds., *Modelling Regional Scenarios for the Enlarged Europe*. Springer: pp. 33–47.

Cant, Alanna. (2015) "The Allure of Art and Intellectual Property: Artisans and Industrial Replicas in Mexican Cultural Economies," *Journal of the Royal Anthropological Institute*, 21(4), 820–837. http://doi.org/10.1111/1467-9655.12289.

Cardoso, Vitória Aparecida, Ana Elisa Bressan Smith Lourenzani, Marcellus Marques Caldas, Cristiane Hengler Corrêa Bernardo, and Roberto Bernardo. (2022) "The Benefits and Barriers of Geographical Indications to Producers: A Review," *Renewable Agriculture and Food Systems*, 37(6), 707–719. http://doi.org/10.1017/S174217052200031X.

Castaldi, Carolina and Sandro Mendonça. (2024) "Places as Brands: Charting the Value of Place-Based Intangibles," *Regional Studies*, 58(10), 1781–1791. http://doi.org/10.1080/00343404.2024.2355280.

©Southern Regional Science Association 2026.

Charters, Steve. (2006) *Wine and Society: The Social and Cultural Context of a Drink*. Elsevier/Butterworth-Heinemann, Amsterdam.

Charters, Steve and Nathalie Spielmann. (2014) "Characteristics of Strong Territorial Brands: The Case of Champagne," *Journal of Business Research*, 67(7), 1461–1467. http://doi.org/10.1016/j.jbusres.2013.07.020.

de Noronha Vaz, Teresa and Peter Nijkamp. (2009) "The Complex Force Field of Traditional Food Systems: Setting the Scene," In de Noronha Vaz, Teresa, Peter Nijkamp, and Jean-Louis Rastoin, eds., *Traditional Food Production and Rural Sustainable Development: A European Challenge*. Ashgate: Farnham, pp. 3–10.

Donner, Mechthild, Lummina Horlings, Fatiha Fort, and Sietze Vellema. (2017) "Place Branding, Embeddedness and Endogenous Rural Development: Four European Cases," *Place Branding and Public Diplomacy*, 13(4), 273–292. http://doi.org/10.1057/s41254-016-0049-z.

Dries, Jonathan. (2026) "Champagne Spillovers: Geographical Indications and Regional Economic Development," *Journal of Wine Economics*, 21(2), 107–122. http://doi.org/10.1017/jwe.2025.10096.

Emery, Mary and Cornelia Flora. (2006) "Spiraling-Up: Mapping Community Transformation with Community Capitals Framework," *Community Development*, 37(1), 19–35. http://doi.org/10.1080/15575330609490152.

Esposito, Elena and David Stark. (2019) "What's Observed in a Rating? Rankings as Orientation in the Face of Uncertainty," *Theory, Culture & Society*, 36(4), 3–26. http://doi.org/10.1177/0263276419826276.

FAO and EBRD. (2018) *Strengthening Sustainable Food Systems Through Geographical Indications: An Analysis of Economic Impacts*. FAO & EBRD, Rome. ISBN 978-92-5-130389-4.

Flora, Cornelia Butler and Jan L. Flora. (2008) *Rural Communities: Legacy and Change*. Westview Press, Boulder, CO, third edition.

Food and Agriculture Organization of the United Nations. (2023) *Geographical Indications and Agri-Food Systems: Lessons from Ten Case Studies*. Food and Agriculture Organization of the United Nations, Rome.

Gauthier, Jeffrey, Jeffrey A. Kappen, and Justin Zuopeng Zhang. (2024) "To Be More Different or Just the Same? Means versus Ends in Hybrid Organizational Legitimacy," *Society and Business Review*, 19(1), 97–112. http://doi.org/10.1108/SBR-03-2022-0080.

Ginsburgh, Victor, Muriel Monzak, and Andras Monzak. (2013) "Red Wines of Médoc: What Is Wine Tasting Worth?" *Journal of Wine Economics*, 8(2), 159–188. http://doi.org/10.1017/jwe.2013.17.

Granovetter, Mark. (1985) "Economic Action and Social Structure: The Problem of Embeddedness," *American Journal of Sociology*, 91(3), 481–510. http://doi.org/10.1086/228311.

Grimmer, Justin, Margaret E. Roberts, and Brandon M. Stewart. (2022) *Text as Data: A New Framework for Machine Learning and the Social Sciences*. Princeton University Press, Princeton, NJ.

Hoppe, Alexander D. and Nataliya Nedzhvetskaya. (2024) "Americana Without America: Rhetorical Geography as a Source of Competitive Advantage," *Regional Studies*, 58(10), 1938–1950. http://doi.org/10.1080/00343404.2023.2197454.

Jafarli, Fuad and Maurizio Canavari. (2025) "Place Branding in Rural Areas: A Literature

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Review," *AIMS Agriculture and Food*, 10(1), 129–152. http://doi.org/10.3934/agrfood.2025007.

Kahsai, Mulugeta S., Randall Jackson, and Peter V. Schaeffer. (2013) "Beyond the Rural–Urban Dichotomy: Essay in Honor of Professor A. M. Isserman," *International Regional Science Review*, 36(1), 81–96. http://doi.org/10.1177/0160017612449981.

Karpik, Lucien. (2007) *L'économie des Singularités*. Gallimard, Paris.

Karpik, Lucien. (2010) *Valuing the Unique: The Economics of Singularities*. Princeton University Press, Princeton, NJ. Original publication: *L'économie des Singularités*. Gallimard, 2007.

Lebaron, Frédéric. (2024) "Symbolic Capital," In Maggino, Filomena, ed., *Encyclopedia of Quality of Life and Well-Being Research*. Springer: pp. 7094–7099.

Liu, Lei, Jian-min Sun, and Zheyuan Wang. (2024) "Comparing Subjective Well-Being Longitudinally: Measurement Invariance of the Personal Wellbeing Index Across Time," *Journal of Happiness Studies*, 25(1), 1–13. http://doi.org/10.1007/s10902-024-00719-w.

Macías Vázquez, Alfredo and Gonzalo Saavedra Gallo. (2021) "Sustainability and Immaterial Commons: Rentier Appropriation and Intermediation in the Artisanal Fishing Space of Southern Chile," *Journal of Cultural Economy*, 14(2), 209–224. http://doi.org/10.1080/17530350.2020.1818600.

Maclean, Mairi, Charles Harvey, and Robert Chia. (2012) "Sensemaking, Storytelling and the Legitimization of Elite Business Careers," *Human Relations*, 65(1), 17–40. http://doi.org/10.1177/0018726711425616.

Manning, Christopher D. and Hinrich Schütze. (1999) *Foundations of Statistical Natural Language Processing*. MIT Press, Cambridge, MA.

Masset, Philippe and Jean-Philippe Weisskopf. (2016) "A Study of the Performance of Fine Wine on the Swiss Market," *International Journal of Entrepreneurship and Small Business*, 29(4), 566–582. http://doi.org/10.1504/IJESB.2016.079966.

Menival, David and Steve Charters. (2014) "The Impact of Geographic Reputation on the Value Created in Champagne," *Australian Journal of Agricultural and Resource Economics*, 58(2), 171–184. http://doi.org/10.1111/1467-8489.12033.

Overton, John, Warwick E. Murray, and Glenn Banks. (2012) "The Race to the Bottom of the Glass? Wine, Geography and Globalisation," *Globalizations*, 9(2), 273–287. http://doi.org/10.1080/14747731.2012.658251.

Paradis, Carita and Mats Eeg-Olofsson. (2013) "Describing Sensory Experience: The Genre of Wine Reviews," *Metaphor and Symbol*, 28(1), 22–40. http://doi.org/10.1080/10926488.2013.742838.

Pertoldi, Martina, Carlotta Fioretti, Fabrizio Guzzo, Giulia Testori, Martijn De Bruijn, Martin Ferry, Stefan Kah, Loris Servillo, and Sissy Windisch. (2022) *Handbook of Territorial and Local Development Strategies*. Publications Office of the European Union, Luxembourg. http://doi.org/10.2760/57919.

Picard, David, Catarina Nascimento Moreira, and Tristan Loloum. (2018) "Wine Magic: Consumer Culture, Tourism, and Terroir," *Journal of Anthropological Research*, 74(4), 526–540. http://doi.org/10.1086/699943.

Pike, Andy, ed. (2011) *Brands and Branding Geographies*. Edward Elgar Publishing, Cheltenham.

Privitera, Donatella, Teresa Graziano, and Enrica Polizzi di Sorrentino. (2025) "New Re-

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gions in a Glass. Embedding Landscape in the Production of Wine Narratives," *Landscape Research*, 50(1), 74–88. http://doi.org/10.1080/01426397.2024.2367471.

Rainer, Gerhard and Christian Steiner. (2024) "Geographies of Wine," In Warf, B., ed., *The Encyclopedia of Human Geography*. Springer: pp. 1–4.

Scott, Allen J.. (1999) *Regions and the World Economy: The Coming Shape of Global Production, Competition, and Political Order*. Oxford University Press, Oxford.

Souza Gonzaga, Lira, Dimitra L. Capone, Susan E.P. Bastian, Lukas Danner, and David W. Jeffery. (2019) "Using Content Analysis to Characterise the Sensory Typicity and Quality Judgements of Australian Cabernet Sauvignon Wines," *Foods*, 8(12), 691. http://doi.org/10.3390/foods8120691.

Spence, Charles. (2019) "On the Relationship(s) Between Colour and Taste/Flavour," *Experimental Psychology*, 66(2), 99–111. http://doi.org/10.1027/1618-3169/a000439.

Storchmann, Karl. (2012) "Wine Economics," *Journal of Wine Economics*, 7(1), 1–33.

Storper, Michael. (1997) *The Regional World: Territorial Development in a Global Economy*. Guilford Press, New York.

Swain, Swapnarag, Charles Jebarajakirthy, Bhuvanesh Kumar Sharma, Haroon Iqbal Maseeh, Amee Agrawal, Jinal Shah, and Raiswa Saha. (2024) "Place Branding: A Systematic Literature Review and Future Research Agenda," *Journal of Travel Research*, 63(3), 535–564. http://doi.org/10.1177/00472875231168620.

Uyarra, Elvira. (2019) "Smart Specialisation as Place-Based Policy. Lessons Learnt?" *Regions*, 315(3), 10–12. http://doi.org/10.1080/13673882.2018.00001022.

Vuignier, Renaud. (2017) "Place Branding and Place Marketing 1976–2016: A Multidisciplinary Literature Review," *International Review on Public and Nonprofit Marketing*, 14(4), 447–473. http://doi.org/10.1007/s12208-017-0181-3.

Wei, Kailei, Weilin Wang, and Shah Fahad. (2023) "Spatial and Temporal Characteristics of Rural Livability and Its Influencing Factors: Implications for the Development of Rural Revitalization Strategy," *Environmental Science and Pollution Research*, 30(17), 49162–49179. http://doi.org/10.1007/s11356-023-25748-5.

Willett, Joanie. (2023) "Counter-Urbanisation and a Politics of Place: A Coastal Community in Cornwall and Rural Gentrification," *Habitat International*, 141, 102935. http://doi.org/10.1016/j.habitatint.2023.102935.

World Intellectual Property Organization. (2021) *World Intellectual Property Report 2021: Reaping the Benefits of Intellectual Property in the Digital Economy*. World Intellectual Property Organization, Geneva.

Yang, Wei and Alan Renwick. (2019) "Consumer Willingness to Pay Price Premiums for Credence Attributes of Livestock Products: A Meta-Analysis," *Journal of Agricultural Economics*, 70(3), 618–639. http://doi.org/10.1111/1477-9552.12323.

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APPENDIX

This appendix collects the comparison across model specifications referenced in Section 6. Table A1 summarises model fit. The baseline text-feature model (sensory and place-linked signals jointly) explains about 22% of rating variance; adding variety fixed effects raises this to about 29%, with improvements in adjusted R-squared and a reduction in residual standard error, which is why the variety-fixed-effects specification is used as the reference model in the main text. The aggregated index models show markedly lower fit, confirming that granular signal decomposition is more informative than composite indices alone, even though the aggregated place index becomes significant once variety is controlled for.

Table A1: Model Fit Summary

Model	n	R^2	**Adj.** R^2	**Sigma**
M1: place + sensory	290	0.217	0.174	2.214
M2: + variety FE	290	0.292	0.219	2.153
A1: indices only	290	0.009	0.002	2.433
A2: indices + variety FE	290	0.118	0.073	2.345

Note: OLS with HC1 robust standard errors; variety fixed effects included where indicated.

Table A2 reports the place-linked coefficients in the baseline (M1) and reference (M2) specifications. The two robust markers, rock-anchored and maritime or saline, strengthen once variety fixed effects are added, while the remaining markers stay imprecise.

Table A2: Place-Linked Coefficients: Baseline (M1) versus Reference (M2) with Variety Fixed Effects

Place-Linked Component	**Estimate (SE) M1**	**Estimate (SE) M2**	p **M1**	p **M2**
Volcanic soils	−0.480 (0.545)	−0.573 (0.694)	0.379	0.410
Rock-anchored	0.345 (0.207)	0.417 (0.181)	0.096	0.022*
Maritime/saline	0.233 (0.108)	0.279 (0.108)	0.031*	0.010*
Mountain terrain	−0.056 (0.218)	0.143 (0.269)	0.798	0.595
Etna/locality	0.174 (0.181)	0.089 (0.178)	0.338	0.618
Volcanic core	−0.003 (0.172)	−0.021 (0.163)	0.987	0.898

Note: HC1 robust standard errors. Coefficients are points per +1 match per 100 words. * $p < 0.05$.

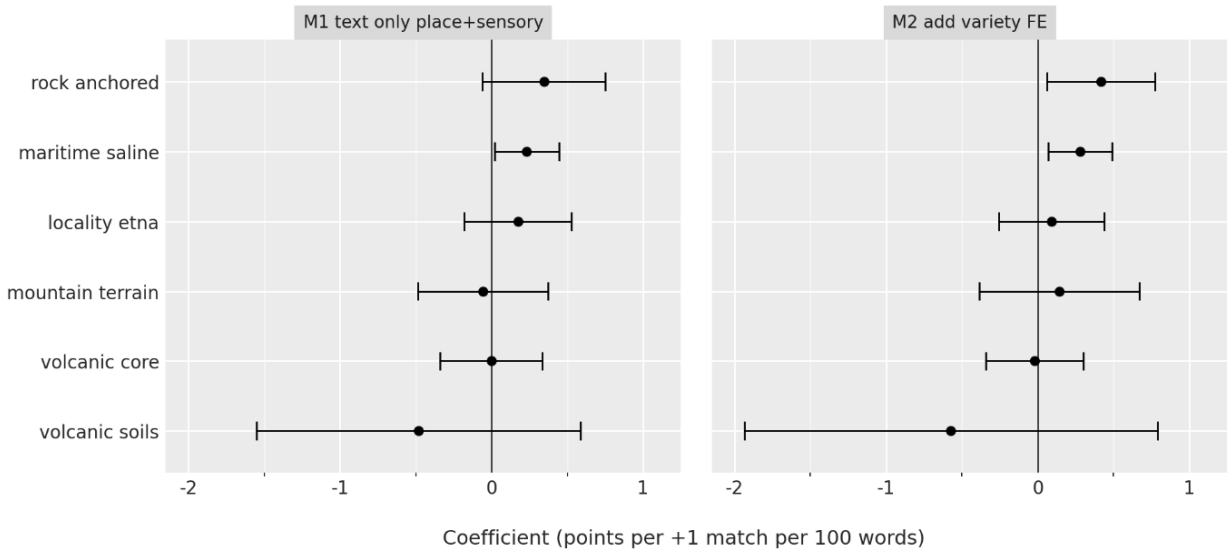
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Table A3: Aggregated Index Models: A1 versus A2

Index	CI95% A1	CI95% A2	Est. (SE) A1	Est. (SE) A2	p A1	p A2
Place total (rate100)	[−0.051, 0.223]	[0.019, 0.311]	0.086 (0.070)	0.165 (0.074)	0.220	0.028*
Sensory total (rate100)	[−0.014, 0.086]	[−0.014, 0.081]	0.036 (0.025)	0.033 (0.024)	0.155	0.172

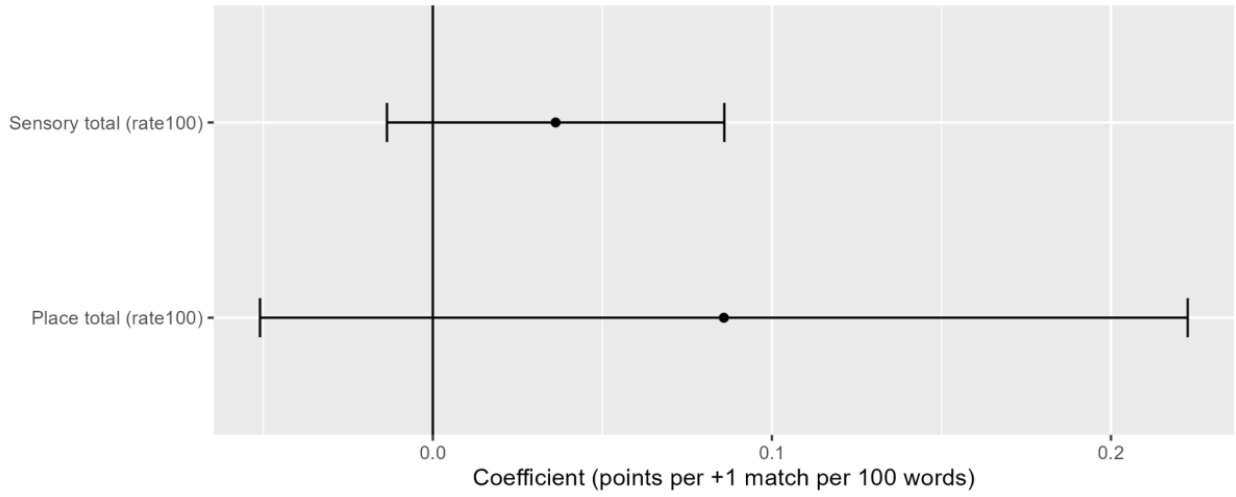
Note: HC1 robust standard errors. Coefficients are points per +1 match per 100 words; CI are 95% robust intervals. * $p < 0.05$.

Figure A1: Place-Linked Coefficients: Baseline (M1, Left) versus Reference (M2, Right) with Variety Fixed Effects



Note: HC1 robust standard errors.

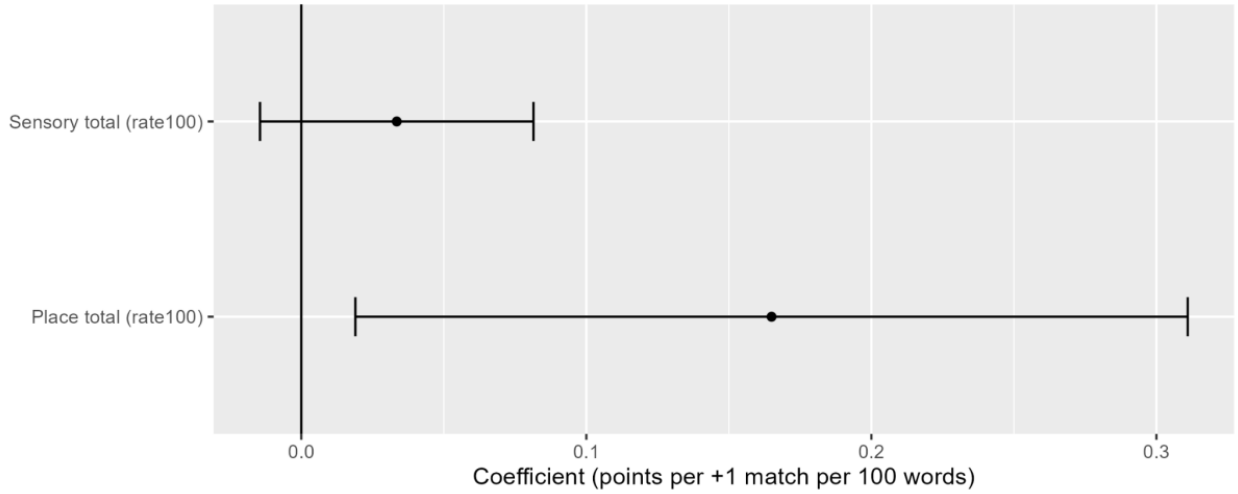
Figure A2: Aggregated Index Model A1 (Indices Only)



Note: Coefficients with HC1 robust intervals.

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Figure A3: Aggregated Index Model A2 (Indices Plus Variety Fixed Effects)



Note: Coefficients with HC1 robust intervals.

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