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The Political-Economy of Property Taxation and Land Taxation[1]

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1. Introduction

Scholars of political economy have employed a range of theoretical and econometric models to explain how the interaction of political and economic variables shapes local tax policy. To the extent that individual behaviors are included in such models, the underlying assumption is that voters are rational. At the very least, these models assume that citizens are well informed about the pros and cons of policy options and will act to maximize their preferences.

Drawing on the work of policy framing, we argue that the "frame" through which citizens come to understand a particular issue is constructed, at least in part, through the local media.[2] This frame includes important information about the policy-issue at hand. However, because the news media is limited in the amount of information it can present, the extent to which the frame provides complete information about an issue is severely constrained. The choice of which information to include or exclude from the coverage, then, is critical in that it 'informs' and shapes the citizens view of the issue. Thus, given two similar jurisdictions proposing similar tax policies but differing in terms of the local news coverage, it is not unreasonable to expect different outcomes. With this in mind, we argue that to better understand local tax policy preferences and outcomes, behavioral assumptions should account for the variation in the way an issue is framed.

A key motivation for studying the media framing of policy issues is to offer an explanation for the well documented gap between the normative theory of property and land taxation, as well as academic studies that provide empirical support in favor of property and land taxation, and their practical appeal to the voter-taxpayer, which is

[2] See, e.g., Price,V. & Tewksbury D. "News values and public opinion: a theoretical account of media priming and framing." In G. Barnett & F.G. Boster (eds), *Progress in the communication sciences* New York: Ablex, 1997), pp. 173-212.

lukewarm or hostile. We argue that one approach to understanding this gap is to better understand the way in which tax policy issues are framed in local media. For example, if a tax is generally understood in the academic literature to be inherently regressive, but the newspaper coverage focuses voter attention on the tax revenue it will generate, then it should not be particularly surprising that voters may support a regressive tax. Our analysis is designed to bridge the theoretical understanding of the property/land tax and the political hostility toward it. While the importance of frames for the adoption and creation of public policy has been demonstrated in policy contexts, such as nuclear war,[3] gun policy,[4] and capital punishment,[5] we are unaware of analyses of tax issues that rely on an examination of the 'framing' of the issue.

Although our argument suggests a causal link between local tax frames and tax policy outcomes, the more modest aim of this paper is exploratory and descriptive. In particular, it first, explores whether it is, in fact, possible to identify tax frames in a manner similar to those employed in other policy framing studies. Second, to the extent that the analysis identifies such frames, this study will describe the elements that constitute them. To this end, this paper addresses two specific questions. *First, how has the local media framed issues of property and land taxation?* In addressing this question, we consider whether the news coverage can be organized around a coherent set of issues - a frame. Also, because local tax policy, particularly relating to the property and land

[3] Gamson, W. A. & Modigliania, "Media discourse and public opinion on nuclear power: a constructionist approach," *American Journal of Sociology*, 95(1 (1989): 1 -37
[4] Haider-Markel, D.P. & Joslyn, M.R., "Gun Policy, opinion, tragedy, and blame attribution: the conditional influence of issue frames," *The Journal of politics*, 63 (2001): 520-543
[5] Dardis, Frank E et al.,"Media framing of capital punishment and its impact on individual's cognitive responses," *Mass Communication and Society*. December 1 (2006)

tax is complex and multi-dimensional, we are interested in understanding what issues are highlighted in the local media coverage.

Second, we are concerned with the question of whether the local tax policy frames correspond with key issues in the literature regarding the strengths and weaknesses of property and land taxation. For both the property tax and the land tax, the academic literature points to specific issues with respect to the incidence and efficiency of the tax. This second question strives to understand the extent to which scholarly work has become part of the real policy discourse.

These questions are addressed by analyzing the local newspaper coverage of four tax policy issues with a textual analysis approach called Center Resonance Analysis (CRA). Although text analysis is a traditional approach to studying media frames, the CRA approach is somewhat novel in the metrics it employs for identifying influential components of a discourse. This approach, however, is gaining credence in the literature and has been recently employed in scholarly endeavors exploring the content of the news coverage surrounding the 9/11 terrorist attacks[6] and the collapse of Enron[7].

For this study, we focus on the newspaper coverage of:

1) the passage of proposition 2 ½ in Massachusetts in 1980

2) the passage of a property tax limitation legislation in Florida in 2008

3) the failure of property tax limitation legislation in Maine in 2004, and

[6] Dooley K. J. & Corman, S.R. (2002) The dynamics of electronic media coverage. In Greenberg, B. (ed) *Communication and Terrorism: public and media responses to 9/11*. (pg. 121-137). Creswell: Hampton Press.
[7] Craig, R.J.and J.H. Amernic (2004), "Enron discourse: the rhetoric of a resilient capitalism," *Critical Perspectives on Accounting*: 15: 813-851.

4) the repeal of the two-tiered tax system in the City of Pittsburgh in 2001. The selection of these cases was based primarily on the availability of data in an online text format**.**

A key motivation for this study is the perceived gap between the theoretical benefits of the property and land tax and its application in practice. The next section summarizes several of the components characterizing this gap. The paper then proceeds by describing some of the elements that make the local tax system complex. This complexity suggests the importance of the local media frame. That is, faced with a highly complex issue, the local media will select and focus on only a few components of these issues. The fourth section of this paper then describes the methodological approach employed in this study to identify the presence and content of the local media frames. Findings from the analysis and the implications thereof are discussed in the paper's final two sections.

2. Theory vs. Practice

Although the extant political-economy models offer numerous important insights into the efficiency and equity impacts of local taxes, they tend to be prescriptive. Thus, while their work describes the type of tax policies a government *should adopt*, they say little about why, in practice, one policy is *actually adopted* over another. This would not be a particularly compelling intellectual issue if policy outcomes tended toward the adoption of theoretically ideal tax policies. This, however, is not the case.

The principles of a sound system of general taxation should guide the creation of a general tax system. These principles include horizontal and vertical equity, the benefits principle or an ability-to-pay principle, balancing the tax shares among the businesses and individuals, neutrality toward favoring one business sector over another, assuring that the administrative costs of collection are economical and the revenue collected is adequate, and that the system is 'transparent' or accountable to the public and elected officials.[8] A recent assessment by Witte similarly relates these principles, noting that tax structures should be: 1) broad-based, 2) neutral, 3) fair, 4) efficient, 5) simple and, 6) accountable.[9] He critiques the current state of evolution of tax structures and adds that in practice they are: 1) narrow, 2) vary in effective rates, 3) abusive of horizontal equity, 4) expensive to administer, 5) complex and 6) divorced from democratic accountability.

The theoretical strengths of a system of municipal finance that relies on the property tax include its reliability, its slow responsiveness to economic cycles (as well as due to assessment cycles that spread out the impact of cyclical impacts) making it a predictable revenue source, and its transparency.[10] Similarly, the local property tax can be characterized, paradoxically, as a tax that "has a long history yet has been under incessant attack and commands approval from economists (as efficient) and political theorists (as transparent) but remains vilified by the public."[11] Indeed, survey data from Gallup and from the former Advisory Commission on Intergovernmental Relations (ACIR) suggest that the property tax is not well liked. In fact, it is the most disliked tax in recent years of polling. To the question, "Which do you think is the worst tax—that is, the least fair?" 41% of the respondents in 2006 and 2004 selected the local property tax, while the next

[8] See, e.g., John Mikesell, *Fiscal Administration*.
[9] "The Politics of Property Tax-Base Broadening," paper presented at Property Tax Policy Roundtable, George Washington University, October 5-6, 2007.
[10] Wilson, J. D., "Property and Land Taxation." In, Arnott, Richard & Daniel McMillen (Eds) *A Companion to Urban Economics*. (Blackwell Publishing, 2006), pp. 348 – 371.
[11] David Brunori, *The Future of State Taxation*. (Washington The Urban Institute Press. 1998), p. 8.

"worst tax" was the Federal income tax selected by 25% of the respondents (Table 1).[12] The property tax's popularity has become worse over the last 35 years, according to this poll conducted by ACIR and has replaced the federal income tax as the worst tax.

Table 1: From Which Level of Government Do You Feel You Get the Most for Your Money?

Year	Federal (%)	State (%)	Local (%)	Don't know/no answer (%)
2006	29	20	31	20
2004	33	21	36	10
2002	32	24	25	19
1999	23	29	31	17
1993	23	20	38	20
1991	26	22	31	22
1989	33	23	29	15
1988	28	27	29	16
1987	28	22	29	21
1986	32	22	33	13
1985	32	22	31	15
1984	24	27	35	14
1983	31	20	31	19
1982	35	20	28	17
1981	30	25	33	14
1980	33	22	26	19
1979	29	22	33	16
1978	35	20	26	19
1977	36	20	25	18
1976	36	20	25	19
1975	38	20	25	17
1974	29	24	28	19
1973	35	18	25	22
1972	39	18	26	17

Sources: Authors' 2006, 2004, 2002, and 1999 surveys, and U.S. ACIR (1972–1993 passim).
Note: In this and all subsequent tables and statistical analysis, data are analyzed in "weighted" form according to a procedure accounting for age, sex, education, race, and region.

Although there appear to be valid theoretical reasons for the adoption of the property tax, the public's perception of the property tax is that it's not a good tax. In

[12] Richard Cole and John Kincaid, "Public Opinion on U.S. Federal and Intergovernmental Issues in 2006: Continuity and Change", *Publius* 36:3 (Summer 2007): 443-459.

other words, majorities (and minorities) perceive they dislike a certain type of tax for at least the following reasons. First, the property tax is often the only tax that is put before the voters, providing them an opportunity to 'just say no' to something, anything. Second, the property tax is not paid daily the way, for example, the sales tax is, but in one large payment (like the income tax, which explains its ranking as the next 'worst tax', according to surveys of taxpayers). Third, misperceptions abound about which level of government is authorized to impose the property tax (this is the 'complexity' argument surrounding a decentralized political system in which a host of overlapping local governments provide a mix of services and access resources, sometimes taxing the same asset). And fourth, voters recognize that they pay taxes on unrealized property value appreciation even if their income remains flat or declines.

Another important criticism of the property tax is based on the nature of the underlying process of value assessment. In fact, it can be argued that much of what makes the property tax more or less equitable is the degree to which property assessments are undertaken in a fair and equitable manner. A fundamental critique of the assessment process is that it does not necessarily value property at its current market value.[13] The difficulty is often one of information. That is, in the absence of a perfectly functioning market, what information can assessors employ to value property? For example, in poor neighborhoods—in which property turnover is limited—the ability to properly assess property value seems to be constrained.[14] In the absence of a perfect assessment process the policy response has been to place various limits on the property tax, such as 1)

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[13] Which is generally what most people understand to be the meaning of the a property's worth. See John Mikesell, *Fiscal Administration*, 6th Edition. (Wadsworth Publisher, 2003).

[14] Weber, R. & Ryan B. (2007) Valuing New Development in Distressed Urban Neighborhoods: Does Design Matter?" *Journal of the American Planning Association*. Winter

statutory property tax rate limits, 2) property tax rate freezes, 3) property tax levy limits and 4) local expenditure lids.[15]

Wallace Oates argues that theoretical views of the property tax can be subdivided into two views, what he calls the "benefit view" and the "new view" (Oates 2001, 21).[16] The former argues that the benefits of local public goods and services and the related property tax liabilities are capitalized into local property values. As such, the benefits gained from public goods and services are paid for through property taxes. If an individual wishes to receive more benefits, they will locate in a jurisdiction that provides such benefits, which will be reflected in the value of the property. William Fischel's 'homevoter' behaves politically in a way that is consistent with the protection of such investment in property and the capitalized value of public investments.[17] In contrast, the new view argues that the property tax is a levy on capital which distorts fiscal decisions of politicians and investment decisions of households.

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[15] Nathan Anderson, "Property Tax Limitations: An interpretative View," *National Tax Journa*l. LIX (3) (2006): 685 – 694; O'Sullivan, A "Limits on Local Property Taxation: The United States Experience." In Wallace Oates (Ed) *Property Taxation and Local Government Finance*. (Cambridge: Lincoln Institute of Land Policy, 2001), pp 177 – 207; Duncombe W. & John Yinger (2001) Alternative Paths to Property Tax Relief. In Wallace Oates (Ed) *Property Taxation and Local Government Finance*. (Cambridge: Lincoln Institute of Land Policy, 2001), pp. 243 – 291.

[16] William Fischel, "Fiscal and Environmental considerations in the location of firms in suburban communities." In Edwin S. Mills, & Wallace Oates (Eds) *Fiscal zoning and land use controls.* (Lexington, MA:Lexington Books, 1975), pp. 119 -173; William Fischel, *The economics of zoning laws: A property rights approach to American land use controls*. (Baltimore: John Hopkins University Press, 1985); William Fischel, "Property taxation and the Tiebout Model: Evidence for the benefit view from voting and zoning," *Journal of Economic Literature* 30 (1992): 171-177; Peter Mieszkowski, "The property tax: An excise tax or a profits tax?" *Journal of Public Economics*. 1:1 (1972): 73 -96; George Zodrow and Peter Mieszkowski, "The incidence of the property tax. The benefit view vs. the new view." In, George Zodrow (Ed) *Local provision of public services: the Tiebout model after twenty-five years*. (New York: Academic Press, 1983): 109 – 129.

[17] William Fischer, The Homevoter Hypothesis (Cambridge: Harvard University Press, 2001).

Despite these criticisms, the property tax has some tangible appeal in practice.[18] For example, compared with the alternatives – a local sales or income tax – the property tax provides a relatively stable source of local revenue. Also, the tax is extremely transparent; thus, citizens are aware of the "costs" associated with the benefits they are receiving in their municipality. Moreoever, even as it is the "least liked" tax, it accounts for a considerable portion of local government own-source revenues. Data from the Census Bureau indicate that property tax revenues constitute a declining portion of own-source revenues, yet they are still a formidable element in local governments' resource bases (Table 2). If "charges and miscellaneous" are removed from own-source revenues, property taxes amount to more than half of all municipal and county tax revenue.

Table 2: The Revenue Composition of Local Governments

		Counties	***Municipalities***	***Townships***	***School Districts***	***Special Districts***
2002	Property Taxes	39.3%	29.1%	72.7%	79.3%	16.6%
	Sales Taxes	12.5%	17.7%	0.5%	1.8%	5.9%
	Income Taxes	2.1%	7.6%	2.2%	0.8%	0.0%
	Other Taxes	3.4%	5.7%	4.1%	0.6%	1.3%
	Charges and Misc.	43.2%	40.1%	20.6%	17.5%	76.2%
1972	Property Taxes	63.0%	46.6%	89.1%	86.0%	24.5%
	Sales Taxes	6.6%	13.6%	2.0%	0.3%	1.3%
	Income Taxes	1.4%	8.0%	0.8%	0.6%	0.0%
	Other Taxes	2.6%	4.3%	3.0%	0.8%	0.0%
	Charges and Misc.	26.4%	27.5%	10.9%	12.3%	74.1%

[18] Brunori, David. *Local Property Tax*. (Washington, D.C. Urban Institute Press, 2003); Fisher, Glenn W. *The Worst Tax? A History of the Property Tax in the United States. (* Lawrence KN. University of Kansas Press, 1996); Giertz, J. Fred. "The Property Tax Bound." *National Tax Journal* Vol. LIX No. 3 (Sept 2006.): 695-705.

The discussion above has focused on the perceived failings of the property tax. Although we cannot cite similar dissent with respect to the land tax, a related paradox exists. Both the theoretical and empirical literature points fairly strongly to the advantages of the land tax, yet its use in practice – particularly in the U.S. – is somewhat limited.

Dating back to the work of Henry George, the land tax is seen as both an efficient and equitable tax. For example, Nechyba[19] concluded that land taxes are more efficient than capital taxes and that land prices might increases after such a shift because of the related increase in productive activity. In terms of equity, George argued that the property tax in its current form was actually a contributing factor to poverty. More specifically, he argued that the property tax provided no incentive for landowners to develop their land to its highest and best use. That is, he argued that the value of the land was not generated by the action of the landowner, as evidenced by the increase in the value of land despite the failure to improve it (e.g. buying property in a neighborhood that is improving). As such, it was philosophically 'fair' to tax the value of the land and return it to the community, which generated the value in the first place.

In practice, particularly in the American context, the land tax has been implemented as a two-tiered tax in which land is taxed at a higher value than structures.[20] This approach to the land tax has been justified in the literature through a range of empirical studies that have pointed to the economic benefits of this tax policy. For example, raising

[19] Nechyba, T. J. "Replacing capital taxes with land taxes: efficiency and distributional implications with an application to the United States economy." In Netzer, D (ed) *Land Value Taxation*.(Cambridge: Lincoln Institute of Land Policy, 1998), pp. 183-204.

[20] George's argument was actually more extreme in that he sought to tax land at 100% of its value.

the land value tax rate was shown to stimulate housing[21] and downtown commercial[22] development in Pittsburgh. Similarly, Brueckner and Mills have found that the property tax results in lower regional output than a land rent tax that generates an equivalent amount of local revenue.[23]

The literature, then, speaks to both the strengths of aproperty or land tax system and to the challenges to it by the voters. Simply stated, scholarship describes these taxes in positive terms, but in practice 1) the public views the property tax poorly and 2) the land tax has not been widely implemented. This discrepancy provides much of the motivation for our study. We argue that the difference between theory and practice can, at least in part, be explained by the "frames" in which these taxes are described in the local media. The necessity for employing these frames is driven by the inherent complexity of the local tax structure.

3. Complexity in the local tax system

Media frames help to explain how outcomes are generated in complex decision spaces characterized by multi-dimensional issues and several interested actors. Recent work by Jones and Baumgartner[24] has demonstrated that contemporary public policy is

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[21] Bourassa, S.C. " Land value taxation and housing development: effects of property tax in three types of cities." *American Journal of Economics and Sociology* 49(Jan 1990:. 101-111

[22] Oates, W. E. & Robert Schwab,"The impact of urban land taxation: the Pittsburgh experience." *National Tax Journal* 50 (Mar 1997): 1-21.

[23] Jan Brueckner, "A modern analysis of the effects of site value taxation," *National Tax Journal* 39 (Mar 1986): 49 – 57; Edwin Mills "The economic consequences of a land tax." In, Dick Netzer (Ed) *Land Value Taxation.* (Cambridge: Lincoln Institute of Land Policy, 1998), pp. 31 – 48.

[24] Jones, B.D. & Baumgartner, F. R. *The politics of attention: How government prioritizes problems.* (Chicago: University of Chicago Press, 2005), p. 10.

sufficiently complex that "different policy actors focus their attention on different aspects of the policy….[thus] at an given point in time [they] tend to focus on only a few of [the issues]." This idea is consistent with descriptions of the local level fiscal structures that provide the context for this paper. In particular, local tax issues can be characterized in terms of the complexity generated from: 1) the shift toward local revenue diversification, 2) increased fragmentation of local government and 3) the inherent interaction between taxation and local land use.

First, local governments were once almost exclusively reliant on local property tax to fund the provision of goods and services. In the last fifty years or more, several social, economic and political 'shifts' have led to the diversification of the local revenue to include a local general sales tax, local personal income tax and a range of user charges. Although the origins of this shift toward local revenue diversification can be traced to the Great Depression, of particular importance to the contemporary system of local taxation is the tax revolts of the 1960's and 1970's. The tax revolts of the 1960's and 1970's, which were primarily targeted at local property taxes led to a range of taxing and expenditure limitations. Subsequently "…local governments have had to find creative ways to finance public services."[25]

Second, while states have increasingly placed tax and expenditure limits on local governments, the range of services that local governments are expected to provide has increased. One response to these shifts has been the proliferation of special districts and other layers of overlapping governments; school districts, fire districts and water districts, for example, have been created to provide specialized services that are often funded

[25] Deborah Carroll, (2006) "The property tax: past, present and future." In Frank. H.A. (ed.) *Handbook of Public Financial Management*, (London: Taylor & Francis Group, 2006).

through local taxes.[26] Neighboring homeowners, then, may be within the same municipality, but may be served by differing fire districts or water districts.

The combination of increased number of revenue sources and overlapping jurisdictions has led to an extremely complicated local tax system. In particular, the connection between taxes paid and goods provided is often not transparent. Whether or not this lack of transparency is a deliberate management ploy of public officials, as some scholars have argued (e.g., see the "fiscal illusion" literature), the point is that in the absence of clearly defined links between tax payments and the provision of public goods, citizens will seek information about those linkages from other sources, such as the news media.

The third source of complexity in the local tax system is related to the interaction between public finance and real property. This complexity can be linked to the changing views of "the appropriate division of public and private rights in land and buildings. … From this perspective, discontent with property taxation is connected to a variety of property-related controversies, such as the debate over development rights, land-use restrictions, environmental protection, and the appropriate charges for private use of federal and state land."[27] Individuals may perceive the tax in reference to other related issues and may therefore pay less attention to the full merits or drawbacks of the tax itself. The difficulty, then, is in disentangling discontent with the tax itself from discontent with these broader issues.

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[26] Michael A. Pagano, "Metropolitan Limits: Intrametropolitan Disparities and Governance in US Laboratories of Democracy," in Alan Altshuler, William Morrill, Harold Wolman, and Faith Mitchell, eds. *Governance and Opportunity in Metropolitan America* (Washington, DC: National Academy Press, 1999), pp. 253-292; Michael A. Pagano and David Perry, "Financing Infrastructure in the 21st Century City," prepared for CEOs for Cities, April 2006.
http://www.ceosforcities.org/rethink/research/files/CEOsForCitiesFinancingTheCity2006.pdf

[27] Joan Youngman, "Property, Taxes and the Future of Property Taxes." In Burnori, D (ed). *The Future of State taxation*. (Washington: The Urban Institute Press, 1998), p. 112.

The local tax system, then, has evolved into a terribly complex system internally, as well as externally with multiple, overlapping jurisdictions and a range of tax and expenditure limitations. We argue that this complexity in local government property tax systems, much like the complexity in many other policy arenas, makes it difficult to present the complete impacts of a policy change to the voting public. As such, news media will, out of necessity, report on only a part of the full policy issue. This partial presentation represents the frame in which voters will perceive, understand and act on the proposed policy change.

4. Cases for Analysis

The analysis presented in this paper focuses on four cases. We recognize that this approach (1) results in an incomplete coverage of the wide-range of policy issues relating to the property or land tax and (2) that we do not have the complete universe of media coverage for the particular policies we study. Although these limitations constrain our ability to make generalizable claims about local tax policy frames, we attempt to discern if such frames are employed in local news coverage about the property and land tax.

In particular, we analyze the text of local newspaper coverage in:

- The Pittsburgh-Post Gazette, to understand the frame(s) surrounding the 2001 repeal of the two-tiered tax, a land-tax system established in 1916
- The Boston Globe, to understand the frame(s) surrounding the 1981 referendum on Proposition 2 ½, a state-wide tax limitation approved during the tax revolts of the late 1970's and early 1980's,

- The Bangor Daily News, to understand the frame(s) surrounding the 2004 referendum on the Maine property tax cap, which was patterned after California's Proposition 13 that reduced the assessed value of land and limited property tax increases, and
- The Miami-Herald, to understand the frame(s) surrounding the 2008 referendum on the Florida tax cap, which cut property taxes, capped future tax increases and created a large homestead exemption.

This section briefly summarizes each of these cases in turn.

First, the Pittsburgh case provides the data for considering the media frames surrounding land value taxation. Pittsburgh began experimenting with the land-value tax in 1913 by an act of the state legislature that set the land tax rate at roughly double the tax rate on structures. In 1979, however, the city made a bold move of more than doubling the land tax while keeping the tax on structures at about the same rate.[28] The tax on land rose to 125.5 mills in 1980, while the tax on structures remained at 24.75. Over the next 10 years, the land tax surged to 184.5 mills where it remained until the single tax was reinstated in 2001. This shift from the two-tiered tax to the single tax provides the basis for our analysis. This policy issue differs from the other three cases examined in two important ways. First, and most obviously, the policy event does not focus on the property tax. Second, the policy shift was not subject to a voter referendum. Thus, the frame may be more significant in terms of the tone it presented, with respect to policy makers, versus the information content it offered to citizens.

[28] See, e.g., Wallace E. Oates and Robert M. Schwab, 'The Impact of Urban Land Taxation: The Pittsburgh Experience," *National Tax Journal* vol L, no. 1 (March 1997): 1-22; Michael Weir and Lillian Peters, "Development, Equity and the Graded Tax in the City of Pittsburgh," *Property Tax Journal* 5 (June 1986): 71-84; Rick Rybeck, "Using Value Capture to Finance Infrastructure and Encourage Compact Development," *Public Works Management & Policy* 8:4 (April 2004): 249-260.

The second tax policy event studied, is the passage of Proposition 2 ½ in Massachusetts. This statewide legislation was one of the major property tax limitation legislations enacted in the U.S. between 1978 and 1981. Under this legislation, the total annual property tax revenue collected by a municipality could not exceed 2 ½ percent of the assessed value of all taxable property within the jurisdiction. Also, property tax increases could not exceed 2 ½ percent. The State enforced this proposition by estimating a municipality's property tax base and making sure that its property tax revenue was at or below 2-1/2 percent of this base. This legislation was passed in a statewide referendum in November of 1981.

The remaining two cases we studied are more recent examples of statewide referendums proposing property tax limitations; specifically, the passage of the Florida cap on property taxes and the failed referendum limiting the increase in assessed property values and capping property tax in Maine. In Maine, a voter referendum was promoted by the TABOR (Taxpayer Bill of Rights) group, which was instrumental in securing passage of Colorado's TABOR bill. The proposal was patterned on California's Proposition 13, and would have set assessed property value limits to 1% of fair market value, rolled back the valuation of property to 1996 levels, and held growth to 2% per year. The electorate voted against the proposal, Question 1, in November 2004 by a nearly 2-1 majority.[29]

The January 29, 2008 vote in Florida on the property tax was clearly the national story that wasn't. Instead, the tax referendum was placed on the ballot along with the Florida primary election for Republican and Democratic delegates to the national conventions. Although the press covered the presidential primary portion of the vote,

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[29] David Bradley, "Property Taxes in Perspective," Center on Budget and Policy Priorities, March 17, 2005. http://www.cbpp.org/3-17-05sfp.htm

unnoticed to the national media was the property tax limitation. Governor Crist campaigned on behalf of property tax reform for his election in 2006. By the time the referendum came up for a vote, it included a nearly $50,000 homestead exemption, and it allowed people to keep their accrued savings with them if they sold their homes and moved to another location. Tax cuts were predicted to amount to 5 to 10%, or approximately $9 billion over five years.[30] Amendment 1 was approved by 64% of the voters.

5. Methodology – Analyzing Local Media

As described above, prior research supports the claim that media framing has an important impact on the way in which individuals perceive, and subsequently act, on different policy issues. To identify the presence and content of a media frame, media outputs, such as newspaper articles, are typically subjected to content analysis. Following this approach, we employ a text analysis, known as Center Resonance Analysis (CRA), to study the content of newspaper coverage for proposed property and land tax policy changes. The goal of the analysis is to identify the presence and content of related media frames.

5.1 Data collection

Using an electronic data repository – Access News World – we collected articles from four newspapers corresponding with the jurisdiction and time frame for the policy

[30] Billy Hamilton, "Florida's Winter of Discontent," *State Tax Notes* (March 3, 2008): 727-731.

event of interest.[31] The articles included in the analysis were identified using a keyword search based on the specific name of the policy event. For example, to collect articles discussing Proposition 2 ½ we queried the Boston-Globe in 1980 for articles that included the term 'Proposition 2 ½' in the lead paragraph. The newspaper source, keywords employed in the search, the days of coverage, and the number of articles collected for each policy event we studied are summarized in Table 3 below.

Table 3. Summary of Newspaper Article Data

	Repeal of the Two-Tiered Tax	**Proposition 2 ½**	**Maine Tax Cap**	**Florida Property Tax Referendum**
Newspaper Source	Pittsburgh Post-Gazette (2001)	Boston Globe (1980)	Bangor Daily News (2004)	Miami Herald (2007/2008)
Keyword Employed in Search	Two-tiered tax	Proposition 2 ½	Tax Cap	Property Tax Referendum
Days of Coverage	45 days Jan 1 – Feb 14	33 days Oct 2 – Nov 4	235 days Feb 10 – Nov 3	62 days Nov. 1 – Jan 1
Number of Articles	16	27	192	35

As shown in Table 3, the number of news articles we collected for each policy event differed substantially. The decision-rule employed for selecting articles was to include those articles printed on or after the date in which the policy change was formally proposed but not to include articles beyond the date in which the policy decision was rendered. Thus, missing from this analysis is the media frames employed leading up to the proposal and the frames used after the policy decision was made.

[31] Although other newspaper repositories exist, such as Lexis-Nexis, we found Access News World to have the most comprehensive coverage in terms of time frame and newspaper sources.

5.2 Analysis

The data was analyzed using Center Resonance Analysis (CRA).[32] Drawing on the *centering theory* of communication, this approach begins with an assumption that discourse, text based or otherwise, is structured in a purposeful manner. The meaning of a text can be understood by looking at the location of influential words, relative to other words in the text. Influential words are those that act as connections to several other words. The algorithms used to identify these words are drawn directly from network theory. In particular, we can draw a comparison to a "social network" where particular individuals hold important positions by virtue of their connections to others in the network.[33] Those with many connections are often described as being very "central." Similarly, one may think of "centrality" in terms of the degree to which an individual connects someone to another individual. The more people who connect through me the more my "betweenness centrality" increases. In CRA the focus is on identifying words that have high betweenness scores. That is, they connect many words to each other. Thus, the analysis focuses on identifying these influential terms.[34] The influence (I) of a word in text T is thus operationalized by adapting the standard social network metric of betweenness centrality as follows:[35]

$$I_i^T = \frac{\sum g_{jk}(i) / g_{jk}}{[(N-1)(N-2)/2}$$

[32] The Crawdad software program was employed for the analysis. A detailed description of CRA can be found in Corman, S.R. et. Al, "Studying Complex Discursive Systems: Center Resonance Analysis of Communication," *Human Communication Research*, 28:2 (2002): 157-206

[33] Wasserman, S & Faust, K. *Social Network Analysis: Methods and Applications*. (Cambridge, UK: Cambridge University Press, 1994).

[34] Following CRA convention an influential term scores 0.015 or greater.

[35] Taken from Corman, et al, op. cit.

Where g_{jk} is the number of shortest paths connecting the j_{th} and k_{th} words, $g_{jk}(i)$ is the number of those paths containing word I, and N is the number of words in the network.

The ultimate goal of the analysis is to identify the presence and content of local media frames. We define a frame as: "a central organizing idea or story line that provides meaning to an unfolding strip of events weaving a connection among them."[36] The CRA analysis attempts to pull out ideas or themes that connect at least parts of the newspaper coverage of the particular policy events studied.

The analysis proceeded in the following way. First, the articles were organized based on the policy event for which they were associated (the repeal of the two-tiered tax, Proposition 2 ½ and the property tax referendums in Maine and Florida). Each individual article within each group of policy events was then analyzed using CRA. This resulted in a series of text networks that could be compared with each other for their structure and content. Specifically, groups of articles can be scored in terms of the degree to which equivalent words shared similar betweenness scores. Two identical texts would have a 1.0 resonance score. Thus, two or more articles that present a theme in a similar manner suggests a "coherence" that is consistent with our definition of a media frame. Articles were identified as being similar to each other by scoring them in terms of their resonance with each other. Following CRA convention, articles that had a resonance score of 0.10 or higher are thought to exhibit a reasonable level of coherence with each other and could be identified as a single frame. The articles comprising a single frame were then re-

[36] Gamson, W.A. & Modigliani, A. " The changing culture of affirmative action." In R.D. Braungart (Ed.) *Research in political psycholog*y (Vol. 3 p. 143). (Greenwich, CT: JAI, 1987).

analyzed to identify the influential words and word pairs that comprise the content of the frame.

6. Findings

This study is exploratory and descriptive in nature. We address the simple issue of: what types of media frames are employed for understanding property and land tax issues. We make no effort at articulating a causal model between the existence of a media frame and a policy outcome *or* between the characteristics of a jurisdiction and the content of a particular frame. We leave these issues, and others, as areas for future research. This section summarizes the extent to which our analysis identifies media frames and the content, thereof.

Our findings for each policy event studied are summarized in Tables 4 through 7. These tables present the content of local media frames described in terms of the most influential word in the frame and the important pair-wise connections this word makes with others in the frame. Before describing these specific findings, two general statements can be made. First, we can with some confidence make the claim that across each of the four policy issues studied, the CRA approach allowed us to identify coherent media frames. However, the number of articles that combine to make up media frames in each of the four policy issues examined seems relatively small as a proportion of the total number of articles included in each analysis. Specifically, they range from 17% for the property tax referendum in Florida to 31% of the articles describing the repeal of the two-tiered tax in Pittsburgh. That is, of all the articles describing the property tax referendum in Florida only 17% of them resonate with one or more other articles in the group. The remaining 83% do not cohere around any single theme. At this point, this finding is difficult to interpret.[37] That is, it is not clear if more coherent statement across fewer articles is more influential with respect to a policy outcome than more disparate information over multiple articles. This issue is one that may be picked up in future research.

Second, across the four policy events the analysis points to three types of frames – a *facts frame*, a *personality frame* and a *topical frame*. First, the "facts frame," not surprisingly, centers around the word "tax."[38] In turn, the term tax is connected to words that describe characteristics of the tax, such as: the title of the tax proposal, other types of taxes, the impacts of the tax, dollar values and to some degree the history of the tax proposal. This frame is particularly interesting because of the terms *not* included in the frame. For example, the terms "study" and "research" are completely absent from this frame (and all the frames for that matter). Given the large body of academic and professional impact studies developed around these tax issues, the lack of reference to any study or research project verifies the gap between theory and practice.

Second, the "personality frame" centers around one of the main actors in the policy discussion. For example, in the news coverage of Proposition 2 ½ a frame was identified around Mayor White. Similarly, for the property tax referendum in Florida, a frame was identified around Governor Crist. This suggests that the perception of the proposed tax policy may be influenced less by the pros and cons of a tax policy as much as by voters perception of the individual(s) associated with the policy.

[37] The literature on media frames does not speak to the issue of proportionality.
[38] Although in the Florida case we also interpret the 'amendment' frame as a fact frame. It is referring directly to the proposed legislation.

Finally, the “topical frame” describes the policy in terms of a specific topic other than the tax itself. For example, the frames identified in the Pittsburgh case focused on “the City” and “the County” while a “School” frame was identified in both the Florida and Maine cases. As with the “personality frame,” the topical frame suggests the characterization of the tax policy around a specific impact.

With these general claims in mind, the remainder of this section summarizes specific findings for the particular cases. First, Table 4 below summarizes the two “topical frames” identified in the analysis of the newspaper articles for the repeal of the two-tiered tax in Pittsburgh. Given the city-specific nature of this policy event, it is not surprising that the focus of frames is on “the city” and “the county.” The two frames are similar in terms of the words they are connected to and to some degree it is hard to distinguish any substantive difference.

Table 4. Repeal of the Two-Tiered Tax – Pittsburgh Post-Gazette

	Number of Articles in Frame	**Resonance**	**The most central term (betweeness value)**	**Linked terms (in order of pair-wise influence)**
Frame 1	2	0.11	County (0.22)	• Dollar Value • Land • Assessment • Building • Judge • Re-assessment • Property • Value
Frame 2	4	0.10	City (0.21)	• Tax • Value • System • Land • Property

				• Murphy • Rate • County • Council • Assessment • Sabre

The three policy events that form the bulk of the analysis look at frames leading to voter referendums on state-wide legislation on property tax limitations. The frames and their content are summarized in Tables 5-7 below. One striking difference between the coverage of these events is evident. The three of the five frames in newspaper coverage of Proposition 2 ½ are "fact frames." That is, they centered around the word tax but are linked to a slightly different set of words. In contrast, the Florida and Maine cases only include a single "fact frame." This suggests the newspaper coverage of Proposition 2 1/2, was much more focused on the tax impacts of the policy than the newspaper coverage of the Florida or Maine referendums.

Another important finding is the presence of a "personality frame" in both the coverage of Proposition 2 ½ and the Florida referendum. This finding is particularly, significant in that the Maine referendum was not approved by voters. Although, we cannot make a causal link, it is worth pointing out that this finding could be interpreted as the importance of strong and charismatic leadership in the passage of tax policy.

Table 5. Proposition 2 ½ - Boston-Globe

	Number of Articles in Frame	Resonance	The most central term (betweeness value)	Linked terms (in order of pair-wise influence)
Frame 1	2	0.20	Tax (0.18)	• Property • Community • State • Old • Revenue • Poor
Frame 2	2	0.19	Tax (0.26)	• Property • State • Local • Revenue • Income • Sale • Percent • City • People • Reform
Frame 3	3	0.10	Labor (0.24)	• Council • State • Need • Delegate • Convention • Tsongas
Frame 4	2	0.10	Mayor White (0.15)	• Organization • City • Issue
Frame 5	3	0.10	Tax (0.22)	• State • Auto • Excise • Property • Revenue • Income • Sale • Cut • Percent

Table 6. Property Tax Referendum – Miami-Herald

	Number of Articles in Frame	**Resonance**	**The most central term (betweeness value)**	**Linked terms (in order of pair-wise influence)**
Frame 1	2	0.1735	Crist (0.29)	• Amendment • Florida • Campaign • Property • Miami • Business • Utility • Voter • State • Help
Frame 2	2	0.1439	Amendment (0.24)	• Tax • Voter • Property • Home
Frame 3	2	0.1320	School (0.25)	• Year • Broward • District • Budget • State • Cut • Money • Tax • Program • Student • Plan • Increase • Funding • Spending

Table 7. Property Tax Referendum – Bangor

	Number of Articles in Frame	Resonance	The most central term (betweeness value)	Linked terms (in order of pair-wise influence)
Frame 1	3	0.4858	Tax (0.24)	• Cap • Property • Percent • Court • Maine • Question • Constitutionality • Ballot • Appraised • Assessment
Frame 2	5	0.2069	School (0.23)	• System • Program • Public • District • State • Service • Town • Budget • Proposal • SAD • Impact
Frame 3	10	0.2258	Town (0.27)	• Tax • Cap • McCarthy • Councilor • Council • Public • Money • School • Referendum • Board
Frame 4	10	0.1378	Town (0.26)	• Tax • Service • School • Budget • Official • Department • Conlow

				• Staff • Committee

7. Implications and Future Research

The "median-voter" is an intellectual construct first articulated by Howard Bowen (1943), which states that policy makers – who seek to maximize public support – will establish public policy in such a way as to appeal to the interests of the median voter. A wide range of studies have been put forward demonstrating that local goods and services are provided in such a way that is generally consistent with the preferences of the median voter.[39]

The median voter model is, of course, not without its critics. A key criticism is that very few jurisdictions vote directly on public service provisions.[40] Although, the general response to this criticism has been that a lack of participation (or participatory mechanisms) may suggest satisfaction with the established public policies[41], we find this critique compelling. That is, while we are willing to accept that policy outcomes may adhere to the preferences of the median voter, it remains unclear how policy makers become aware of the preferences of the median voter in the first place. A better understanding of the role that the "tax policy frame" plays as articulated by the news media in informing the perceptions of voters is certainly a step in the right direction of explaining the voting behavior of taxpayer-voters. Moreover, the median-voter model

[39] See, for example, Borcherding, T. & Robert D. , "The demand for the services of nonfederal governments," *American Economic Review*. 62 (1972): 891-901
[40] Verba, S. & Norman H. Nie, *Participation in America: Political Democracy and Social Equality* (New York: Harper and Row, 1972).
[41] Oliver, E. "The effect of metropolitan economic segregation on local civic participation," *American Journal of Political Science*. 43 (1999): 186-212

requires that the policy-maker be entirely reactive to the whims and wishes of the voter who may be ill-informed about the benefits or impacts of a given policy. Our underlying argument addresses these issues without conflicting with the established evidence for the importance of the median voters preferences. In particular, the act of "framing" explicitly allows for the engagement of the public in an ongoing discourse with elected officials with respect to the pros and cons of a particular policy. This discourse provides the mechanism by which policy makers can 'read' the interests of their constituents, while also putting forward their own argument for the proposed policy in an effort to persuade the constituents of its merits.

Further research needs to incorporate the "tax frame" as one of many explanatory variables in designing a 'positive theory of property and land tax', which would examine the relative affect that the 'frame' has on voters in addition to other traditional factors such as income, homeownership, tax burden, and service delivery satisfaction.

Moreover, it might be instructive to map the "frame" of tax policy professionals and compare it with the "frame" of the voters. It would not be surprising to find that public finance economics, tax policy analysts, and tax professionals use a "frame" of conveying their support of the property or land tax that is quite unlike the "frame" that voters and homeowners feel comfortable with. A common "frame" to connect with the electorate has not been successfully developed by academics, nor by elected policy officials. We speak an obscure and unrecognizable language to each other, either by design (to baffle our audiences or maintain the clubbiness) or by ignorance (we really think we are talking to each other, when we're really talking past one another). Either way, we have forgotten how to communicate and 'frame' the property and land tax issue sensibly. What we need is to adopt a language that ‘translates’ technical issues into understandable, political-discourse relevant information. Otherwise, we’ll continue to face the perennial challenge of defending the virtues of a property or land tax system by employing a language that only experts understand, while bemoaning a political system that allows everyone to vote.