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EDITOR'S REMARKS

We are pleased to present the fifth volume of *New Visions for Public Affairs*. This year's edition, which is also the first to be offered in print, represents just a small selection of the academic research conducted by our students. The wide array of works broached in this volume highlights the versatility of our field and the interdisciplinary nature of our research. This point is evidenced by the breadth of scholarship included in this volume, touching topics in law, business, and public administration, respectively.

We are also pleased to present a special interview with the retiring Professor Robert Warren. Dr. Warren has earned a reputation as an extraordinary and eminent scholar of urban affairs in our School. To say he will be missed is a significant understatement.

I would like to acknowledge our editorial board members, who have spent the past academic year planning for the journal, reviewing articles, and helping to prepare this volume for publication and distribution. We also extend our sincere gratitude to the faculty advisory board, Drs. Maria Aristigueta, Jonathan Justice, John McNutt and Leland Ware. Thank you for supporting our journal.

We hope that this edition informs the existing body of research in the broad realm of public policy.

Kind regards,

Paul Ruiz
Editor-in-Chief

Fabian Socialists and Red Light Traffic Cameras: An Interview with Dr. Robert Warren

Philip Barnes¹

After a 53-year career in higher education and following 38 years of continuous academic and professional service to the School of Public Policy and Administration at the University of Delaware, Professor Robert Warren will step back from his teaching responsibilities.

Dr. Warren's urban studies courses – Governance, Planning & Management, Contemporary Issues in Urban Affairs & Public Policy, and Planning Theory & Urban Policy – have been staples of the School's graduate curriculum for decades. His wide-ranging and deep concern for the marginalized and the oppressed is evident in his teaching and mentoring. Never one to shy away from disclosing his feelings on governmental or political matters, Dr. Warren is the embodiment of C. Wright Mills and Aaron Wildavsky's challenge to follow the Quaker dictum, "speak truth to power."

In a wide-ranging interview with *New Visions for Public Affairs*, Dr. Robert Warren – who will continue to advise his Ph.D. students and work on publishing journal articles – talked about his views of the past, present and future. People familiar with Dr. Warren will readily acknowledge his capacity to articulate connections between seemingly unrelated aspects of political and social reality. In this interview, he demonstrates this intellectual ability by pointing out a hidden relationship between H.G. Wells and red light traffic cameras. More fundamentally, Dr. Warren succinctly exposes the complex dynamics between theory and practice in critical social inquiry.

The editorial board of *New Visions for Public Affairs* would like to thank Dr. Warren for participating in this interview. We thank him for what he has done for his students, the School of Public Policy and Administration, the University of Delaware, and for his contribution to the development of a more just and equitable society.

In the Beginning...

PB: *What is it about your personal life history that led you to develop an interest in urban policy and governance?*

RW: Well, I was always interested in public affairs and policy issues. As a kid in grammar school, I wrote a seventh grade paper on why Russia was our best ally.

PB: *What year was that?*

RW: It was in '45 or '44, when it was proper to say such things. I majored in political science as an undergraduate at UCLA and then went into the political science program at the graduate level. I spent a year in law school, decided I didn't like it, and went back into political science and got my graduate degree at UCLA.

¹ Philip Barnes is an editorial board member for *New Visions for Public Affairs*. He interviewed Dr. Warren on January 24, 2013.

PB: *What attracted you to political science?*

RW: I had been active in politics. California at that time was democratizing the political process and we had democratic clubs all over the state. So there was a parallel Young Democrats, and we had a Hollywood Young Democratic Club that I was actively involved in when I was at UCLA.

PB: *Is there anyone from that time who heavily influenced the way that you think about politics?*

RW: I really don't think so, because in a lot of ways, my thinking initially was sort of what progressive thinking was in the 1950s and 1960s, and since then, my concerns have jumped out of the box. They are following the opposite pattern of what is supposed to happen. As one advances in age, you are supposed to become more conservative, and I think that as I've advanced, I have become less conventional and more radical in my thinking.

PB: *How has our thinking and understanding of policy changed since you first began studying political science at UCLA in the 1950s?*

RW: Well, it's changed in a number of ways. The basic institutional emphasis on what the parties were or weren't doing, what kind of administrative policies were desirable and how well they were being carried out, the structure of government. The initial revolution was the quantitative one. Then the political orientation moved from the focus on institutions to what the actual politics were, and to who is seeking and gaining what within the political system. This shift was a great debate for a brief amount of time in the late 1950s and the early 1960s. The great irony was that I got my first job because I had done well in statistics at UCLA, and the University of Washington believed it was getting a new recruit who fit the quantitative orientation.

"As one advances in age, you are supposed to become more conservative, and I think that as I've advanced, I have become less conventional and more radical in my thinking."

Much more recently, I think there have been a number of critical changes. One is not interdisciplinarity so much as it is a merging of non-mainstream thinking, for example, out of geography, out of economics, out of political science, that don't fit the traditional social science view. You've also got a change in the relationship between urban scholarship and funding sources. In the 1960s, you needed an umbrella to protect yourself from all the federal money that was available for urban research, and by the 1970s, there was starting to be a cutback in research funding as well as in federal programs that were aimed at improving, rebuilding, and enhancing cities. So I think that has been a factor as well, which is also reflected in our program here, where there has been a substantial shift from a basic urban focus to [a focus on] policy and administration.

Operational Citizenship

PB: *One of the core concepts that you espouse in your governance pro-seminar is this idea of "operational citizenship". Can you explain what that concept is about?*

RW: It's one that has taken an increasingly important role. Operational citizenship is a normative concept, although in some cases we describe it as if it were accepted. What it basically tries to do is identify those aspects that would be involved if ever an individual were able to live adequately – have a good education, health care, housing – and be able to develop and pursue their talents and capacities. Period. And so one of the things that this responds to is that if in

administration, if in policy analysis, if in research, we initially look at problems or whether or not the governmental structure is appropriate, we have a series of unstated norms involved that don't involve operational citizenship.

One of the basic things that comes out of this [is the foremost question] – not who exercises power, or how this program can be used to slice up our analysis so that we are looking at very small portions of what actually affects an individual or community. Instead, we ask, “OK, in Newark, for example, what is the status of everyone who lives here in terms of operational citizenship regardless of the governmental system, regardless of the policies?”

And if we find out, which I'm sure we would, that there is tremendous differentiation and tremendous inequality, and if there are a lot of people with poor housing, health, education, then the question is, “How do we organize ourselves collectively to create operational citizenship for everyone?” And then we start to ask, “OK, well if that is true, then how do we design this program, that program, and the overall way in which the institutions are organized?”, as opposed to looking at the institutional arrangement or

"Operational citizenship is a normative concept ... What it basically tries to do is identify those aspects that would be involved if an individual were able to live adequately – have a good education, health care, housing – and be able to develop and pursue their talents and capacities. Period."

the real politics to identify who rules. That doesn't tell you anything about the ruled.

PB: *So why is it that despite policy intervention to provide services and resources to people, some are not able to realize their operational citizenship?*

RW: Well, basically because the system is intentionally rigged.

PB: *In what way?*

RW: Well it depends. Sometimes it is legally rigged. For the United States – the beacon of democracy, the shining city on the hill which had the honor of being the first democracy in the modern world – who were the citizens? Wealthy white males. That's hardly a reflection of operational citizenship. Then there is tremendous power that private institutions have, and the extent to which financial groups were able to overwhelmingly and illegally engage in profit-generating behavior that ruined the lives of millions of people by forcing them out of their homes, in most cases illegally, and in other cases because they gave them mortgages which were known to be unworkable. And then we've got a carceral system in which the government has policies that result in a situation where a quarter of all Black males have some kind of involvement in the criminal justice system that makes it impossible for them to exercise operational citizenship. The drug laws in the country are clearly, by any rational or empirical analysis, totally dysfunctional, and impose costs on everyone, but particularly on low-income people that are swept up into the criminal justice system. If you are obviously gay, the possibility that you're going to be beaten up or beaten to death still exists. And if you're in India and you're a woman, to be raped and killed in the process generally has no negative consequences for the perpetrators.

PB: *Would you agree with the claim that “inoperational citizenship” has become normalized?*

RW: Very much so.

Operational Citizenship, continued

PB: *If that is the case, what does effective action look like in a world where inoperational citizenship has become normalized?*

RW: Well, it's the old logic. You fight battles and you fight the war, so on the one hand a whole series of efforts to modify particular negative aspects need to be undertaken where you don't challenge the system per se, but at the same time, you need to also be attempting to change the overall system. So it's not a matter of only assuming you have to overthrow the system, but [also having] to move on several levels. One is to fight specific current issues while at the same time attempting to change the overall system. So the first case, especially from an academic perspective, is about having some opportunity in the educational process to have people become aware of reality. And what they do with it then, as they go into a professional career, or teaching and research, will hopefully take that into account. But at least they have an opportunity of knowing that reality is different from what the media and government says, and even different from what is presented in many of their courses. And so if they have got a clue that there might be other ways of understanding what is going on, at least it creates the possibility that they might take that into account as they go along.

PB: *That's in specific relation to academics and people in the education system. But with regards to those outside of the education system, what does effective action look like?*

RW: It's all over the place. There is an incredible array of groups that are organized to pursue things on a limited basis that relate to operational citizenship, or freedom, or the ability to speak in ways that are not acceptable. The Internet is mind-boggling and a part, in contrast in many ways to the academic world is that so much is accessible and so much is created on there. It's startling. You've got hackers and all sorts of things in social media. You've got stuff going on that allows various groups to organize, articulate

ideas and join with others. This idea that we've destroyed space and time is largely an empty statement because it doesn't really get at all of the things that are being created as possibilities. But then you've got the example of Aaron Schwartz, who, at 14 invented new RSS Internet capacity, and at 26 killed himself because the government— and this gets a bit involved – was prosecuting him for things that shouldn't have been the basis of prosecution. They were threatening him with 35 years in prison for things that were basically trivial.

[O]ne of the things that is particularly important, and that I am particularly interested in, is again relating to reality, because you've got the government increasing the amount of information that is classified [and] increasingly attempting to limit the distribution of information on the Internet that it doesn't wish to be made available to the general public. On the other hand, you've got individuals and organizations that are able to – because of the technology – make information and actions available to millions of people.

Now, whenever there is a public demonstration, the first thing the police tend to go after are the media with cameras and people with their cell phone cameras. Going back to campus situations, at UC Davis where you had students protesting over, if I recall, a draconian increase in tuition, they were peacefully sitting on the lawn, and the police were coming by, spraying them in the face with pepper spray. This was photographed

“... I'd be interested to see if anyone is teaching a course on the illegal behavior of government, which is extensive and widespread.”

and put on the Internet, and it caused a tremendous response, and ultimately the campus police chief had to resign. So you've got this ability to make reality – what is actually going on – available that otherwise under normal circumstances would not be available to people. The police would have claimed they were defending themselves, or [that] they were keeping or preventing these people from doing something illegal. Without the video they probably would have prevailed in court. So you've got this increasingly complex play between the government in general, the police, and citizens. It goes back to Rodney King where this person living in the apartment building next to the police beating up Rodney King videoed it. That has been accelerating as an area of conflict [namely as to] what is real and what is censored and manipulated.

PB: *In your teaching you consistently mention race and racial marginalization as being an inseparable feature of the urban experience. Is full racial equality in American cities attainable?*

RW: Yeah, it could be. There's no reason why it couldn't. But this gets back to another basic issue which we talked about, and that is that academics, especially in public administration and urban affairs, never tend to give any attention in what we teach or the policies we pursue [to what is assumed about human nature]. I think there is no question that there tends to be a natural tendency to discriminate or negatively respond to “the other” that doesn't fit your own color, ethnic background, so on and so forth. Minorities – and at times majorities – everywhere are discriminated against, and so it takes a particularly extensive effort to create the conditions where this doesn't occur. But it's a quirky thing. If you look at human behavior over history, there has always been this kind of behavior.

PB: *If that's the case, if it's human nature, then how do we achieve more equitable outcomes?*

RW: Well there are ways to act, but it's almost an unending undertaking. You can abolish slavery, but then you can

economically subordinate the people who are liberated and you can provide inadequate education. We have done a number of things which have eliminated visible and obvious forms of discrimination without eliminating the overall discrimination or creating variations of it. Now, if you are a wealthy upper-to-middle-class African American, you're generally in pretty good shape. If you're an impoverished African American male teenager, you're likely to get picked up as a matter of course for no good reason by the police, and in one way or another probably wind up in the prison system.

Education

PB: *I'd like to talk about your thoughts on the education system in general and the university in particular. We've already talked about it a little bit.*

RW: Yes.

PB: *What role is academia currently playing in society?*

RW: It's playing a number of roles. Below the university, we've got the educational system being made more and more dysfunctional by policies rhetorically designed to turn everybody into a genius. “Leave No Child Behind” or the “Race to Excellence” are resulting in increasingly dysfunctional ways in which public schools are organized, the ability of minorities and low-income kids to get adequate education, and particularly the ability of teachers to organize as unions. You've got a multiplicity of motives that are dominating what is going on. Some are based on political advantage, some are continuing racial segregation, some are to make sure that workers cannot organize or bargain effectively with those they work for.

Education, continued

PB: *What role is the university system playing?*

RW: Obviously that's a gigantic question, but the mainstream critique is that it's becoming more and more a part of the corporate structure.

PB: *A degree mill?*

RW: A degree mill on the one hand, and on the other, it is undertaking programs and emphasis that will connect the university with corporations and their funding and support.

PB: *Is it losing its ability to critically engage in social development?*

RW: Or critique, or to generate new knowledge that isn't of obvious interest to corporations.

PB: *Specifically within the discipline of urban affairs, what is happening at the university level today?*

RW: That's certainly a good question, and I'm not sure I could claim to be so much on top of the basic journals and what people are doing. My general impression is that the vast majority is focusing more and more on urban administration as opposed to critical analysis of what is going on. At the same time, as I have attempted to reflect in my courses in recent times, there is an increasing distance between reality and an understanding of what is actually happening in cities. Also, in urban affairs, there is an issue in the way course content is taught, in that there is a tendency to focus on a particular problem without incorporating it into the larger system of which it is a part.

PB: *It sounds like you are saying that the practice of critical social and urban research is declining in quality.*

RW: Yes.

PB: *What can be done to resurrect it as a meaningful endeavor?*

RW: Somehow funding [must] be found for hiring more and more tenured-track faculty. This is another kind of problem because, in many ways, having tenure gives a unique capacity for faculty members to pursue the truth and not necessarily just do more of the same.

PB: *In what ways are faculty members outside of the tenure track prevented or discouraged from pursuing the truth, as you say?*

RW: On the one hand, they are usually underpaid, and maintaining the job is of particular importance. We've got a few cases that have been very visible where people like [Ward] Churchill at the University of Colorado was taken out because of his views on things. Or if you're anti-Israel, there are a few cases.

PB: *Norman Finkelstein.*

RW: More generally, if you don't reflect the mainstream and you're non-tenured, the likelihood that you'll be replaced exists, and it can be done without any great legal problem. Your ability to maintain your job is much more problematic if you don't have any legal basis to keep it, if, for one reason or another, the college or the department or the dean decides that you are not any longer teaching what is needed.

PB: *Are demands on faculty members for teaching becoming so great that they are losing their ability to engage in critical research and publishing?*

RW: I think that's true, but also, one of the things that is seldom mentioned is the extraordinary extent to which clerical work has been shifted to faculty. Not only that, but the clerical work has to be done on websites, which takes three times longer than paperwork. In the old days, faculty had access to secretaries, and now it is overwhelmingly been transferred to the faculty to do that. The format [that] is

supposedly more efficient and more speedy turns out to be exactly the opposite.

PB: *You mentioned earlier that a number of themes and thinkers are emerging from fields outside of policy – geography and economics, for example. Along those lines, can you name some current researchers or figures in those fields that are best able to articulate current urban problems, as well as offer meaningful solutions?*

RW: I think the question of meaningful solutions is chimerical. We are much more in need of understanding what is going on, and then figuring out what types of responses there might be [at] this point in time. This isn't directly related to people who are currently doing things, but I think that for my purposes, it is pulling together people over a long period of time. For example, John Dewey, among other things, basically said that democracy is always in flux; there is no end state. So we need to be aware, not that we have an end state to reach or that we [have achieved it] and have to protect it, but [that] requirements and conditions constantly change, and we need to be reinventing democracy constantly.

[Bent] Flyvbjerg, who is really a planner but has done some very interesting things, points out that democracy is never without its foes. Drawing upon work he had done on a city in Denmark, one of the important things he

"John Dewey, among other things, basically said that democracy is always in flux; there is no end state. So we need to be aware ... [that] requirements and conditions constantly change, and we need to be reinventing democracy constantly."

said is that we have to be constantly alert and concerned about the continuing attacks on democratic governance. It's not a case where this is a given state. Another strain is within democratic systems. We are constantly in conflicts over extending the actual rights and benefits that are supposedly universal to people who are systematically left out.

Ignorance and Urban Policy

PB: *You spoke a bit already about the lack of focus in current research into what is real and what isn't. What other considerations are academics and social inquirers missing or ignoring?*

RW: There is a great variety of things that need to be taken into account if we are concerned with policy, equity, equality, et cetera. Age is a factor. The urban affairs [field] pays almost no attention to age as a variable. What happens to citizens and how we define their status as human beings between birth and 20 years old is an extraordinarily complex and perplexing thing. The infant and young child have absolutely no capacity to act in their own interest and their own wellbeing, and development depends on society, government, and particularly the parents. The only time we talk about it is when we pay attention to the school systems. In many cases, the school systems now are turning into prisons with the merger of the police and the educational system. You've got the NRA solution to have an armed guard in every school, if not in every classroom. On the other hand, if a six year old accidentally brushes up against a teacher, they may wind up suspended.

There is, as I understand it, reasonable evidence that low-income minority kids are much better off if the policy is to integrate class rather than race because there is some evidence that when poor kids are put into a predominately working or middle-class school, they do better than when they are put into a racially integrated school.

Ignorance and Urban Policy, continued

Then there is the whole thing of the citizenship status of teenagers, where tremendous repression goes on. The assumption always is that the teenagers are on a fast ride to hell with all their bizarre behaviors. Every generation of teenagers is at war with their parents and elders. This is only looked at in terms of how you control these people instead of understanding what is going on. Between birth and 20, these creatures go through a whole series of relationships for power, control, creativity, and their status within society. But if you find any serious concern about what urban policy is towards children and teenagers, there are few people that do something. It's not part of the normal discourse. It's the same thing when we are concerned with elderly people because [retirement] takes a lot of money. If you are over 75, frail, and elderly – unless you've got really serious family members, or a lot of money – you've literally lost all control over your life and physical condition. But that's not taken into account. If we are talking about the city, the city is composed of this vast array of age-related conditions that are not part of our normal understanding.

PB: *What other aspects of cities are not part of our normal understanding?*

RW: The militarization of space within cities is another one. If we start to look at those spaces within cities where full civil liberties and free activity exist, they are increasingly small. When you step into the boundaries of airports, you lose your citizen's rights. If you are a Black or Latino teenager in New York City, in a number of neighborhoods you are likely to be stopped and picked up by the police for no reason at all. I've run into the comment a few times that if you are a parent of a Black male teenager in Manhattan, the first thing you do, if you want your kid to survive, is to teach them not to do anything that will rile a police officer.

PB: *So militarization is one phenomenon that is becoming more prominent in cities. You've also expressed concern with two other processes, namely the privatization of public space and the enhancement of surveillance. When these forces converge, what is the effect on the urban experience?*

RW: It creates conditions that violate the constitutional and legal rights of people systematically. In many of these cases, the authorities don't have the legal power to do what they're doing, but they go about doing it, and the courts are likely to allow them to do it in a number of cases.

PB: *For example?*

RW: Prosecutors withhold evidence that they should give to defense attorneys. Unless there is some unusual denouement where it is unavoidably [made] known, the courts won't do anything to prosecutors. So you get a variety of ways in which governmental officials engage in illegal if not criminal activity that the judicial system allows, or is very reluctant to provide prosecution for. Again, this goes back to our understanding of human nature. If you look at the actual use of public authority, there is extensive illegal and criminal use of it. There is a book that came out in the 70s, *How the Government Breaks the Law*, and it is a detailed and extensive identification of how cities, counties, and states violate the rights of women and children and engage in collusion with criminal organizations. In public administration, for example, I'd be interested to see if anyone is teaching a course in the illegal behavior of government, which is extensive and widespread. Going back to the question, if I can remember it.

PB: *Militarization, privatization, surveillance of cities....*

RW: Transportation security people continuously violate the rights of people as a matter of course. Again, teenagers get knocked around in a variety of ways with curfews and other kinds of ways in which they are prevented from engaging in what would be considered normal teenage activity in public places.

Or, if you want to hold a political protest within the city, there are all sorts of ways in which you are subject to restrictions. During the 2004 Republican convention in New York City, there were a number of public mobilizations, marches in the street. The police were trying to divert them and there were clashes between the police and the political demonstrators. Ultimately I think the City of New York had to pay four million dollars in damages, although the police claim they were just preventing illegal action or defending themselves.

This was one of the cases where a lot of people took videos of what was going on, and [when] these were introduced into the court, [they] showed that the police were totally fabricating what had happened. Again, there are an increasing number of cases where illegal police actions against individuals are caught on video, and that is why the police are so interested in preventing anybody from filming. In a few states, laws have been passed that make it illegal to film police in action. One of them, I think in Illinois, got tossed out by the courts. So no matter where you are, if you want to make a political protest, you've got a serious likelihood that the police are going to engage in illegal activity to contain [and prevent] you from doing it effectively.

"The drug laws in the country are clearly, by any rational or empirical analysis, totally dysfunctional and impose costs on everyone, but particularly on low-income people that are swept up into the criminal justice system."

Gargantua and Polycentrism Revisited

PB: *Let me take you back to 1961 for a second. In 1961 you coauthored a seminal paper with Vincent Ostrom and Charles Tiebout titled "The Organization of Government in Metropolitan Areas: A Theoretical Inquiry". In that paper, you evaluate two fundamentally different scales and organizational models for the governance and provision of public goods and services in urban environments. One model which is highly centralized, bureaucratic, and all-encompassing is referred to as Gargantua. The second model you call Polycentrism because it is a more decentralized form of decision-making where local authorities provide public goods and services.*

In this paper, you identify a potential shortfall of the polycentric model where negative externalities create conflicts between local governments. You conclude that Gargantua may grow in power and encompass Polycentrism by stepping in and settling these inter-community disputes when polycentric governments are not able to settle them amongst themselves (pp. 841-842). In the fifty-plus years since writing this paper, do you feel that this process has occurred?

RW: The idea of Gargantua was that it was really highly centralized. That was Vince Ostrom's term that he liked. The extent to which that analysis is still adequate, I think, has changed because of the way in which scale and globalization has occurred in general. It is no longer simply a question of the relationship between the smaller localities within a metropolitan area. It is more a question of if you are a city – Newark or Wilmington – what are the actual boundaries that produce negative spill-ins, and what do you produce as negative externalities? The ability of communities to form cooperative arrangements is more likely to occur for day-to-day operation of municipal-type services. In most metropolitan areas, they collectively create [larger scale systems] – garbage disposal, transportation – in which representatives of various communities sit on the boards making the decision. [I don't think] that the idea of metropolitan-scale governments imposing dysfunctional effects on otherwise independent cities has become a particular problem.

But the ability of cities to adequately meet the problems created by the larger system is an issue. You've got Detroit, which in large part has been done in by economic decisions totally outside the control of the city. In Michigan, you do have an example where the governor can appoint and impose managers on cities that, in his judgment, are declared financially in trouble, and literally eliminate democratically elected governance for the city.

PB: *And this is an example of Detroit being impacted by global forces, which, as you say, are totally outside the control of the city. So is Gargantua-Polycentrism a scale issue?*

RW: I think the obvious step is to shift from the idea of a large scale system which, within a metropolitan area, imposes things on smaller scale communities, to an understanding of multiple scales that can produce negative or positive spill-ins. At the same time, we need to think about how smaller communities can create positive and negative externalities.

PB: *Another interesting thing about this paper is that it argues that under a polycentric governance arrangement, private vendors – under contract with local authorities and subject to performance standards and regulatory oversight – can be efficient providers of public goods and services. Not without controversy, this particular topic is central to much of the political polarization we are experiencing today at both local and national levels. With respect to the urban context, what are your current thoughts on the provision of public goods and services through contract with the private sector?*

RW: Theoretically, there is no reason why it can't be done. One of the strange paradoxes in the use of private services was discussed and vetted by Fabian socialists around 1900. Ebenezer Howard, in his Garden City, had a chapter about whether or not all services should be controlled by the municipality or not. Basically he said that in some cases, private provision is more effective. H.G. Wells was arguing for a metropolitan government for London around 1900 and said he wouldn't object to private provision of some services if they met public requirements. This is in contrast to the assumption that private is always better than public provision of anything, which is part of the argument for turning services over to the private sector – things like highway systems and everything else under the sun, prisons and so on. Part of the problem now is the idea that there has to be a clear arrangement that ensures that public values are reflected as opposed to [the value of] profit maximization.

To show you how widespread my concerns are, one of the things that I'm interested in is red light surveillance cameras. They were extensively used on the assumption that they provide greater safety by preventing crashes. One of the debates is that they are tremendous generators of income for a large number of cities, but they are virtually all privately operated. The private company shares half of everything and so the increase in the number of tickets is of great benefit to them.

However, as I understand it, the key is the duration of the yellow light. If you have a longer yellow light, like four seconds, it will produce an equal or better reduction of red light crashes than the surveillance cameras but it won't generate any income. There is a tremendous debate all over the country [on] the privatization of this service. There is a place in California where the private company – and there are several that have a large number of contracts – will write contracts to guarantee them a certain income. In this particular case, they fought and tried to prevent a ballot initiative to get rid of red light surveillance cameras, which was perfectly legal under the charter of the city. You get this tremendous number of cases where the goal is clearly generating income instead of increasing safety, and the way you can enhance the safety without the tremendous technological and private profit is by not using them.

"... the extent to which multinational corporations control things from a global scale is immense at this time ... so unless you are the United States, or China or the EU, the fate and condition of many countries depends on corporate decisions and power ..."

Predicting the Future

PB: *Let's jump to the future. Urbanization accelerated dramatically in the past few hundred years and it shows no signs of slowing. How do you see this process unfolding in the future?*

RW: I don't think there is any way of knowing.

PB: *Right, but if you were to gaze into a crystal ball and make a prediction...*

RW: I'd turn to my real source of knowledge – science fiction – and see what they have to say.

PB: *And what do they have to say?*

RW: Nothing good ... all sorts of dystopian things. Part of the issue is not simply the tremendous concentration in population, but a shift in where the centers of gravity are. By 2050, China and India are going to be overwhelmingly dominant in a variety of ways, and the US is going to slowly decline as the imperial power dominating the world. If you look at the current status of mega-places in India, it is horrendously skewed, and you've got millions of people living on the streets. As the population grows, and as the number of megametropolitan areas over the globe is primarily developed outside of the existing leading industrial countries – again the internal dynamics of what occurs in China, in Indonesia, in Malaysia, in India, ... there [is] no way [the U.S. will remain dominant]. Then you've got Africa. It may get to the Orwell version where you have Oceania, and Eurasia, and East Asia constantly shifting war with one another rather than cities or mega-areas.

Predicting the Future, continued

There's this minor point that we haven't touched on at all, and that is that ecological sustainability is another thing which will obviously need to be factored into the growth and agglomeration of populations. And so now, not only global warming, but also food access and water access for this tremendous increase in population will require a quite different set of conditions and policies and understandings than we have now if we will have any chance of having a functional world in the future. But when you put them into the technological, ecological, race, and imperial aspirations, which is the next empire? Maybe China will regain its status as the center of the world. That's why simply a straight line projection of how we deal with the problem of more and larger cities and mega-areas totally underestimates the framework that needs to be in mind.

Quite seriously, a look at what science fiction is generating would be an important set of clues or ideas to incorporate into the discourse and dialogue. But it has to go beyond the question of how we organize a larger number of mega-metropolitan areas in less developed parts of the world.

PB: *Do you think the current systems of government are up to this challenge or will they have to be radically altered?*

RW: I'll just go back to what I referenced about Dewey. No, they are not adequate. We constantly have to reinvent and reconstitute the governing system, especially if it is to have a reasonable degree of democratic content.

PB: *On the one hand, you have this massive and rapid transformation in technological, ecological, and social environments. On the other hand, you have a governance arrangement which needs to change in response to these other transformations but is slow in doing so. Is there not some sort of paradox here, and how can that be resolved? Will it be resolved, or will it eventually reach, for lack of a better term, a breaking point?*

RW: Well, the human race is perfectly capable of reaching a breaking point. But a variety of adaptations have occurred. We've got the World Bank. We've got the International Monetary Fund. But the multinational corporations and the international governmental agencies like the World Bank have created an infrastructure that is manipulating, controlling, and distributing all sorts of resources unequally. The United States is intervening [with 500-odd] military bases in other countries around the world, and we support authoritarian regimes much more than we support emerging democratic regimes.

One of the science fiction visions is a world in which the nation-state disintegrates within globalization, [and the resulting] takeover is a sort of collusion of criminal cartels and multinational corporations. They become the infrastructure ruling what goes on in the world. I think this underestimates the capacity of armed power by the US now, or [by] China in the future. But the extent to which multinational corporations control things from a global scale is immense ... There has already been a significant shift, so unless you are the United States, or China or the EU, the fate and condition of many countries depends on corporate decisions and power at this time.

PB: *So we haven't heeded Eisenhower's warning to beware of the military-industrial complex?*

RW: Exactly.

PB: *Is capitalism sustainable?*

RW: As many people have pointed out, Marx was a little in error in his estimate of its viability. It has been constantly readapting itself. So the idea that multinational corporations have increasingly gained power and control over things is another adaptation of capitalism. Whether or not it can sustain itself if the environment starts to collapse, or if enough problematic conditions occur so [that] somehow there is a gigantic shift in the values of people around the world ...

PB: *The 'Occupy' movement, for example ...*

RW: Yeah. So there is no obvious evidence that it will necessarily collapse of its own weight. But you do have totally dystopian options with environmental or economic collapse which are possible. Unfortunately less likely, but far more preferable, is something like a global shift in human understanding and action that could take place.

Reflection

PB: *You have been a faculty member in the School of Public Policy and Administration, formerly the School of Urban Affairs and Public Policy, since 1975. Can you take a moment to reflect on the time you have spent here?*

RW: Only in part. I think the experiences have had a variety of great benefits, and the primary aspect of it is being able to work with an amazing array of bright and intelligent students. On the one hand, it's being able to interact and work with the graduate students here, which has been a greatly productive aspect. On the other hand, seeing the [decline in] emphasis on and resources for an urban focus ... has been perplexing and troubling, but that is hardly unusual in life. There are all sorts of things that could be dwelt on, but that's another undertaking.

Intersectional Disadvantages in the Emergence and Transformation of Legal Disputes

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Intersectionality theory asserts that individuals' social experiences differ based on the different social locations individuals occupy within society. In addition, sociolegal research suggests that individuals possess different experiences in the emergence and transformation of legal disputes but, to date, has not empirically incorporated intersectionality theory into its analysis. This paper asks, how can intersectionality theory enhance and further develop sociolegal research on legal disputing? By using Felstiner et al.'s (1980) framework for describing and analyzing the emergence and transformation of legal disputes and drawing on existing sociolegal scholarship, this paper argues for the importance of taking into account the different experiences of individuals within society when examining the emergence and transformation of legal disputes. I further argue that intersectionality theory should be incorporated in sociolegal research to elucidate the disparate ways legal disputes emerge and are transformed for different individuals and the various disadvantages that may exist for certain social groups in asserting legitimate legal claims. Public policy implications and examples are discussed.

Introduction

Sociolegal scholarship broadly examines the role of law in society. Various studies exist examining the social context of law after a legal dispute has formally been recognized, in terms of legal consciousness (Merry, 1990), judicial relationships (Shdaimah, 2009), and legal processes and outcomes (Best et al., 2011). For example, Corey Shdaimah (2009) examines the reciprocal working relationships of legal service lawyers and the clients they serve to elucidate their understandings of the work they mutually perform and the role their work plays in the justice system as a whole. However, because many disputes never materialize into formal legal claims, it is also important to examine the ways legal disputes are created and declared as such.

Felstiner et al. (1980) provide a framework for describing and analyzing the emergence and transformation of legal disputes by positioning individual citizens, as opposed to legal institutions, centrally to the examination of law. While the work is not an authority on intersectionality theory

(and, in fact, was written before most contemporary intersectionality theory was systematically articulated) Felstiner et al.'s work is seminal in sociolegal studies. The authors argue that, while the idea that the United States is an overly-litigious society is widely accepted, the study of the emergence and transformation of legal disputes suggests that this is not the case. Conversely, they argue that, in our society, too few formal legal disputes emerge either because most injuries are never recognized as such or because most injuries that are acknowledged are never

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addressed by our society's legal institutions. Therefore, Felstiner et al's work provides theoretical support that intersectionality theory should have a central position in sociolegal work because the recognition of injuries and the formal acknowledgement of legal disputes resulting from these injuries may be unattainable to certain people based on their subordinated positions within society.

For Felstiner et al. (1980), legal disputes are socially constructed phenomena, meaning that they are developed in specific social contexts. Specifically, the scholars argue that legal disputes emerge and are transformed through a process that involves perceiving an event as injurious ("naming"), attributing the named harm to a person, group, or institution ("blaming"), and expressing the injury to the entity believed culpable ("claiming") (p. 635). However, the emergence and transformation of legal disputes are not only contingent upon social context, but also upon structural constraints (Albiston, 2005; Felstiner et al., 1980), individual agency (Albiston, 2005), and individual psychological factors (Felstiner et al., 1980).

Felstiner et al. (1980) assert that the transformation of an unidentified harm to a legal dispute possesses several characteristics. Transformations are subjective because the presence of recognizable or perceptible behavior is not required for a dispute to emerge (p. 637). Additionally, transformations are unstable, reactive, and complicated. The transformation of an injury to a legal dispute reflects the feelings and perceptions of the individual(s) involved which are transformed, redefined, reinforced, and/or challenged over time based on the existence of new, sometimes ambiguous, information, various actors representing complex social institutions, social structural factors, and conflicting values and objectives (p. 637-638). Finally, transformations are incomplete because legal disputes are produced from and often create further legal conflicts (p. 639).

Given Felstiner et al.'s (1980) framework for describing and analyzing the emergence and transformation of legal disputes, including the process by which disputes are created and transformed and the characteristics of the progression, it is important to take into account the ways the transformative processes described will vary for different people based on where they are positioned within society. Studies exist examining the effects of individuals' unique social locations on the likelihood of successful litigation. For example, Best et al. (2011) examines how intersecting social locations disadvantage plaintiffs in discrimination cases both in terms of demographic intersectionality (i.e. legal officials discriminating against plaintiffs who possess multiple social characteristics) and claim intersectionality (i.e. plaintiffs who claim that discrimination occurred as a result of their possessing multiple social characteristics). However, as asserted previously, by focusing on claims that have been successfully declared by plaintiffs, Best et al.'s (2011) examination fails to elucidate how individuals may be disadvantaged in making legal claims and how this disadvantage may vary based on where individuals are uniquely located within society.

This paper asks, how can intersectionality theory enhance and further develop sociolegal research on legal disputing? Specifically, this paper argues for the importance of taking into account the different experiences of individuals when examining the emergence and transformation of legal disputes. I further argue that intersectionality theory should be incorporated in sociolegal research to elucidate the disparate ways legal disputes emerge and are transformed for different individuals and the various disadvantages that may exist for certain social groups in asserting legitimate legal claims. In this paper, I first outline intersectionality theory and connect it to Felstiner et al.'s (1980) framework for examining the emergence and transformation of legal disputes. Subsequently, by using existing literature, I argue for the importance of using an intersectional framework to examine how disputes are recognized and are formally acknowledged as legitimate legal claims because of the variation that exists among social groups in terms of the emergence and transformation of disputes.

The Role of Intersectionality Theory in the Emergence and Transformation of Legal Disputes

Intersectionality theory asserts that individuals' social experiences differ based on the different social locations individuals occupy within society. Specifically, intersectionality scholars argue that individuals' lived experiences are rooted in the intersection of various social characteristics, including, but not limited to, race, class, and gender (For example see Baca Zinn & Thornton Dill, 1996; Burgess-Proctor, 2006; Collins, 2000; Crenshaw, 1991). Based on an intersectional framework, the multiplicative influences of various social characteristics produce distinctive social arrangements of power and inequality based on structural constraints and differential access to power and resources. For example, as Best et al. (2011) assert, social discrimination that is unique to black women cannot be accounted for as simply a summation of racism and sexism (p. 993) but produces a specific, multiplicative influence that must be taken into account.

Intersectionality theory is relevant to Felstiner et al.'s (1980) framework for describing and analyzing the emergence and transformation of legal disputes and is, thus, important to consider when examining how legal disputes emerge and are transformed over time. Felstiner et al. assert that legal disputes are socially constructed phenomena that are a reflection of the subject's definition and perception of the experience (p. 631-632). The recognition of an injurious experience, including social injustices and physical or mental harm, can only exist if an individual perceives it as injurious (Felstiner et al., 1980, p. 632). In accordance with the assertions of the authors, this recognition differs among individuals based on the subjective and changeable nature of the transformation of legal disputes. Similarly, based on an intersectionality framework, individuals' experiences differ based on the multiplicative influence of the various social characteristics they possess. Thus, it is reasonable to assume that the recognition of an injurious event will differ based on where individuals are positioned within society.

Felstiner et al. (1980) assert that examining the emergence and transformation of legal disputes means studying a developing social process as it unfolds by examining the social and structural conditions associated with individuals perceiving experiences as injurious (or not perceiving them as injurious) and their responses to the unjustified experiences (p. 632). Thus, "naming" (Felstiner et al., 1980) an injurious experience is not the only phase in the emergence and transformation of disputes in which intersectionality theory is useful. Individual's various social locations and the differing degrees of structural and institutional constraints individuals face also influence how individuals respond to such injuries and, thus, if a formal legal dispute is recognized and claimed as such. Felstiner et al. (1980) assert that structural and institutional arrangements constrain the decisions, whether legal or extralegal, available to potential disputants (p. 636). Based on an intersectional framework, these restrictions will vary across social groups. For example, according to the transformative perspective, various agents of transformation, which include individuals and institutions within society, shape the transformation process. But, again, the relevance and influence of these agents vary by individuals' positions within society and are subject to social structural constraints. Thus, variations exist in individuals' experiences of and opportunities to file a formal legal dispute.

Elizabeth Hoffmann (2009) asserts that socially marginalized groups may have difficulty accomplishing the transformation of a legal dispute because the same power and status differentials that caused the initial harm may also obstruct the recognition and formal realization of a legal claim. Specifically, she asserts that, "naming, blaming, and claiming are often stringently discouraged for less powerful groups, preventing disputes from being fully developed and rights from being fully asserted" (2009, p. 496). Therefore, consistent with the intersectional perspective, members of socially marginalized groups may be precluded from making legitimate legal claims because of their subordinated status and relative lack of power within society.

Thus, the transformative perspective encourages a critical examination of how legal disputes emerge and are transformed based on individuals' social positions to elucidate how social inequalities play out in the legal process (p. 633, p. 673). Felstiner et al. (1980) assert that, access to justice by means of the legal system should be a method to moderate the asymmetrical distribution of socially allocated power, resources, and advantage of certain groups within

society but, ironically, may amplify social inequalities between social groups by precluding certain individuals from obtaining legal justice (p. 637). As the authors assert:

the study of transformations should illuminate both the ways in which differential experience and access to resources affect the number and kinds of problems that mature into disputes and the consequences for individuals and society when responses to injurious experiences are arrested at an early stage (p. 649-650).

Thus, structural inequalities may advantage some individuals and disadvantage others in the ability to recognize and formally claim legal disputes.

Marchetti (2008) argues that law and legal processes are not equipped to consider how ascriptive characteristics, such as class, race, gender, and disability, complicate legal issues and create unique experiences of marginalization. Therefore, it is imperative for sociolegal scholarship to actively take into account the unique social experiences of individuals when examining the emergence and transformation of legal disputes. Specifically, intersectionality offers the opportunity to elucidate how structural disadvantage in legal claims making differentially affects various groups and advantages certain groups over others.

Legal/Rights Consciousness, Social Location, and the Emergence and Transformation of Legal Disputes

Many studies exist examining the legal consciousness of individuals throughout society. For example, Ewick and Silbey (1998) explicate three primary orientations, or types of legal consciousness, individuals can possess in relation to law: “before the law”, “with the law”, and “against the law”. In “before the law”, individuals view legality as disconnected from everyday life. But, in this orientation, legality is also perceived as authoritative, predictable, rational, and objective (p. 47). Thus, individuals who possess this orientation towards the law recognize and are deferential to “the law’s claim to autonomy” (p. 47). In “with the law”, individuals describe law as a game to be played and won by utilizing already existing and newly formulated rules. In this legal orientation, individuals value the usefulness of law to accomplish desired outcomes over concerns regarding law’s procedural legitimacy (p. 48). Finally, in “against the law”, individuals feel that law supersedes their personal ability to either orientate “before the law” or “with the law”. Thus, people who identify with this legal orientation often end up resisting the system as a way of organizing and managing the perceived power law has over their own lives. Importantly, the three types of legal consciousness elucidated by Ewick and Silbey (1998) are not mutually exclusive categories and must be understood relative to one another (p. 224).

Existing scholarship also illustrates how individuals’ legal consciousness is often shaped by where they are positioned within society. Ewick and Silbey (1998) assert that the categories of legal consciousness they delineate are variable and can be articulated by the same people in different times and spaces. They state, “legal consciousness varies across time (to reflect learning and experiences) and across interactions (to reflect opportunity, different objects, relationships or purposes, and the differential availability of schemas and resources)” (p. 53). However, they also assert that specific types of legal orientations may be associated with specific groups of people. For example, the scholars suggests that individuals who are marginalized within society are more likely to articulate being “against the law” because of their relative lack of power within society (p. 235). Therefore, based on intersectionality theory and existing legal consciousness literature, the ways individuals view the law and legality in their own lives will vary based on where they are positioned within the social order.

Correspondingly, Kathleen Hull’s (2003) study of the legal consciousness of same-sex couples illustrates how legality, in the absence of official law, plays a role in the marital rituals of homosexual couples and how variations exist in the ways homosexuals view, perceive, and enact law and legality relating to marriage. Hull (2003) conducted interviews with same-sex couples to examine how legal consciousness was expressed through practices and views of marital rituals.

Homosexual couples are important to examine because they are socially disadvantaged in relation to the culturally valued definition of marriage because, on the whole, they are prohibited from entering into legally recognized marriages.

Hull found that, even though all same-sex couples do not use the law for marital purposes, legality, beyond the official law of the state, continues to be present in their lives. For example, for some couples, religious enactments of marriage often operated as a proxy for state law as a source of legality relating to marriage. Specifically, the representation and authority of religious officials and religious marital rituals often produced a sense that the marital union was “real” in the minds of the participants. Thus, based on structural constraints, religious practices are one way same-sex couples performed marital rituals in the absence of formal law.

However, Hull (2003) also argues that her findings illustrate that legal consciousness, particularly in terms of legality, should be understood as a “layered phenomenon” because of the diverse views same-sex couples possess regarding cultural practices of marital rituals (p. 653). Specifically, the views and enactments of legality by same-sex couples are not universal. Thus, the views of law and legality the homosexual couples in Hull’s study possess relating to marriage are a direct reflection of their social location. In addition, based on an intersectional framework, we would expect homosexual and heterosexual couples to possess different views of the relationship between law, legality, and marriage.

Studies examining legal/rights consciousness also exist illustrating how law interacts with particular social systems of meaning to differentially shape individuals’ rights consciousness and their mobilization of the law (Albiston, 2005). Catherine R. Albiston (2005) asserts that law and legal rights are cultural resources whose negotiation only exists within the context of structural constraints and individual agency. In her view, culture restricts individuals’ rights consciousness which, in turn, reproduces and perpetuates existing social values and structures. So, structural constraints in the form of mainstream cultural beliefs regarding specific systems of meaning, such as gender and disability, can prohibit individuals from utilizing legal resources.

However, in addition to finding that employees’ rights mobilization are constrained by cultural values and structural constraints, Albiston (2005) found that individuals can also employ law as a way of challenging existing, hegemonic ideas regarding, specific to her study, employment and leave. Specifically, individuals who influence the lives of employees, known as agents of transformation (Albiston, 2005; Felstiner et al., 1980) are capable of shaping and influencing an employees’ decision to make a legal claim regarding leave. As Felstiner et al. (1980) argue, social networks, reference groups within which to contextualize an injustice, access to legal officials, and the influence of disputing institutions, such as courts, all influence the emergence and transformation of legal disputes (p. 644-649). However, based on an intersectionality framework, the specific agents available to certain people and their specific influence differs based on where the potential disputants are located within society. Thus, it is important to use an intersectional framework when examining the legal/rights consciousness and legal mobilization of individuals within society to elucidate the structural constraints certain groups of people face in utilizing the law.

Similarly, Engel and Munger (2003) argue that social context, individual identity, and structural constraints shape and influence individuals’ legal rights consciousness and the mobilization of law. The scholars argue that a constitutive effect exists between rights and identity in which legal rights and identity reciprocally affect one another. Specifically, in this view, laws create individual identities and beliefs which, in turn, shape and influence their use of the law. Additionally, as with much of the current sociolegal scholarship, while Engel and Munger examine race, class, and gender independently of one another in terms of how individuals who possess these social characteristics and identities differentially mobilize the law, they do not examine the multiplicative effects of intersecting disadvantages on identity and rights mobilization. However, as asserted previously, sociolegal scholarship would benefit from examining law and legality from an intersectional perspective because of differential structural constraints and society’s allocation of social power and resources.

In sum, existing legal consciousness literature elucidates how individuals view the law and legality in their own lives and illustrates that individuals’ perceptions of law are, in part, shaped

by their social location and their corresponding social identity. As a result, individuals' legal consciousness also shapes the emergence and transformation of legal disputes. As stated previously, legal disputes are socially constructed in that the recognition of an injustice and the response to the perceived injustice are based on the perceptions, views, and experiences of the individuals involved. Additionally, consistent with intersectionality theory, existing legal consciousness literature, and the assertions of Felstiner et al. (1980), the recognition of an injustice and the transformation of an injustice to a formal legal dispute will differ among individuals based their unique social locations and the structural and institutional constraints they must confront.

Influence of Social Location in Legal Claims Making

While existing scholarship does not, on the whole, incorporate an intersectional framework in examinations of the emergence and transformation of legal disputes, current research does exist examining the effects of independent social characteristics on legal claims-making. This body of scholarship suggests that intersecting disadvantages are present in recognizing formal legal claims and, therefore, that emergence and transformation of legal disputes will vary depending on where individuals are uniquely positioned within society. Thus, current empirical research on legal disputes illustrates the importance of taking into account intersectionality theory to examine how legal disputes materialize and are recognized as such.

Scholarship exists illustrating that perceptions of experiences as injurious or as an injustice, such as discrimination, vary by social location (Hirsh & Kornrich, 2008; Hirsh & Lyons, 2010). For example, consistent with Felstiner et al. (1980), Hirsh and Lyons (2010) assert that an important component in the recognition of legal disputes is how individuals name experiences as injurious. Through household and telephone surveys conducted with adults in Atlanta, Boston, Detroit, and Los Angeles, Hirsh and Lyons (2010) found that ascriptive characteristics, such as race, class, and gender, are associated with perceptions of and, thus, the identification of discrimination. In terms of race specifically, they found that Blacks and Hispanics are more likely than whites to perceive racial discrimination in the workplace. However, no statistically significant differences were found regarding perceived workplace discrimination for Asian and white employees. Their findings suggest that "race discrimination may be a more accessible social construct for understanding negative workplace experiences for lower-status racial/ethnic minority workers, yet also confirms important variation in racialized experiences among minority groups" (p. 288). Additionally, their findings imply that structural constraints and access to power and resources affect groups of people differently depending on their unique social locations. Correspondingly, the scholars conclude that individual acknowledgment of discrimination varies by where individuals are located within society (p. 291).

Similarly, Morrill et al. (2010) examine race and the legal mobilization of youth in school settings. They argue that race is relevant in young people's perceptions of legal rights violations because of the awareness youth possess, particularly minority youth, of their subordinated statuses within society (p. 657). They found that Black and Latino youth are more likely than white or Asian youth to perceive legal rights violations within school settings. Consistent with an intersectional framework, they argue that young people who identify with certain racial groups are differentially located within society (p. 658) and, therefore, are confronted with differential structural constraints and access to social power and resources. Thus, again, this examination illustrates that where individuals, youth or adult, are positioned within society shapes how they perceive injustices against them.

In addition, empirical work exists illustrating the problematic and complex nature of recognizing an injustice and filing a formal legal complaint in response to the harm. For example, Bamberger et al. (2008) examine how workplace adversity differentially affects workers of different race and gender groups. They found that, while the overall rate of grievance filing by racial minorities and women were not significantly different than their white or male counterparts, racial minorities (in comparison to whites) and women (in comparison to men) are

more likely to file workplace grievances in response to specific adversary workplace conditions, such as abusive supervision and exposure to workplace hazards. Thus, their findings suggest that the relationship between specific conditions in the workplace, particularly aversive conditions, and the proportion of employees filing grievances against their employees is not the same for all social groups (p. 255).

Additionally, studies show that barriers exist for certain groups of people in terms of making legitimate legal claims. For example, Kristin Bumiller (1998) examines how the transformation of discrimination disputes are shaped by the psychology of individuals labeled and treated as victims. She problematizes the legal protection model, which posits that the law will be utilized by victims of injustices to remedy the wrong doing and to provide future protection. However, instead of being readily accessible to victims, Bumiller found that antidiscrimination laws do not protect victims, particularly women and racial minorities, because of the powerful barriers that exist for these groups in producing valid legal claims. She states:

The model of legal protection assumes that those who have suffered harms will recognize their injuries and invoke the protective measures of law. Since most antidiscrimination laws rely primarily on the victims to identify violations, report them to public authorities, and participate in enforcement proceedings, these laws tacitly assume that such behavior is reasonably unproblematic and that those in the protected classes can and will accept those burdens (p. 2-3).

Thus, Bumiller asserts that the emergence and transformation of legal disputes are indeed problematic, especially for certain segments of the population. Specifically, the victims in her study voiced that powerful barriers exist in terms of perceiving their experiences as prejudicial and in establishing a legitimate claim against discrimination (p. 4). In addition, she argues that anti-discrimination ideology may actually reinforce the victimization and disadvantage of certain social groups, namely women and racial minorities, instead of providing protective measures against victimization (p. 2-3).

Similarly, Gleeson (2010) examines how citizenship documentation influences the legal consciousness and legal mobilization of immigrants employed in the United States. Through interviews with documented and undocumented workers in California and Texas, Gleeson found that undocumented immigrants face various barriers in making legal claims, such as the ubiquitous fear of being deported and the necessity of maintaining steady employment. Therefore, in addition to an individual's social location shaping their perceptions of injurious experiences, social and structural barriers also exist for certain groups of people to make legitimate legal claims against injustices perpetrated against them.

Thus, scholarship exists elucidating the challenges and barriers specific to certain groups of people in making legal claims against injustices based on differential structural constraints and access to power and resources within society. However, as previously illustrated, existing scholarship, generally, does not incorporate an intersectional framework in examinations of the emergence and transformation of legal disputes. Nevertheless, two notable exceptions exist.

First, in addition to the differential affects of a young person's race on their perception of a legal rights violation, Morrill et al. (2010) found that regardless of race, youth in school settings are more likely to utilize extra-legal, as opposed to legal, avenues against discrimination because, for example, of fear of institutional unfairness or not fully understanding how the legal system works. Thus, in addition to the familiar categories of gender, race, and ethnicity, this study illustrates that a person's age also influences the realization of legitimate, formal legal claims.

Second, Marshall (1998) examines the interaction of race, class, and gender in legal mobilization against sexual harassment in the workplace. She found that the multiplicative interaction of the three social characteristics, as opposed to the independent effects of any one social characteristic, produced social distance between sexually harassed women and their employers that resulted in the discounting of the women's complaints (p. 765). For example, the working-class women in Marshall's study experienced social distance from managerial supervisors who were often male. Thus, they experienced a multiplicative effect of

marginalization both for being women and working-class. In any form, the social distance created between the women and their employers rendered extralegal resolution of the women's complaints virtually unattainable. However, the women were able to utilize specific agents of transformation (Albiston, 2005; Felstiner et al., 1980), namely attorneys, to successfully litigate their sexual harassment claims.

It is important to note two primary limitations to the previously mentioned studies that utilize an intersectional framework. First, Marshall's examination of the intersectional disadvantage of the legal mobilization of women in the workplace is relatively dated. While many structural constraints and disadvantages have remained constant over time, it is, nevertheless, important to empirically incorporate an intersectional framework into current sociolegal examinations of the emergence and transformation of disputes. Secondly, sociolegal scholarship would benefit from studies examining various axes of social location by incorporating additional social characteristics into empirical investigations, such as disability, religion, and age (particularly the elderly). While race, class, and gender are arguably the most commonly used social characteristics in intersectional analyses, it is also important to examine how individuals who possess other social characteristics recognize injustices and formally file legal claims.

Intersectionality Theory and Public Policy

Felstiner, et al. (1980) assert that the examination of the emergence and transformation of legal disputes opposes the idea that Americans are overly-litigious. Conversely, this perspective suggests that too few formal legal disputes emerge because there are barriers to naming, blaming, and claiming these injustices. An important public policy example is welfare reform. In 1970, in *Goldberg v. Kelly*, the Supreme Court granted welfare applicants the right to appeal if denied benefits through what are known as 'fair hearings'. These hearings provide a voice for low-income people (Lens and Vorsanger, 2005) who otherwise have little influence over the policy decisions that affect their lives. However, according to Lens and Vorsanger (2005), these fair hearings are rarely used by welfare clients. In order for welfare clients to engage in 'fair hearings', they must be able to 'name' an injury (that they have been unjustly denied welfare aid), 'blame' the appropriate entity (welfare agency) for the injustice, and formally 'claim' or appeal the unjust discontinuation or denial of aid.

While we would expect it to be unlikely for welfare recipients to 'name' an injustice and, subsequently, 'blame' an entity for that injustice, Lens (2007) found that this was not the case. Conversely, she found that most of the participants in her study named that they were unjustly denied welfare aid and blamed the welfare agency. Specifically, Lens (2007) found that the recipients believed they have been wrongfully and arbitrarily evaluated as unwilling to engage in employment. However, many of the welfare recipients did not take advantage of the 'fair hearings' because they viewed the welfare agency as inflexible and difficult and, thus, were skeptical of the agencies ability to help them. Therefore, Lens' (2007) study illustrates the importance of naming, blaming, and claiming in the transformation of formal legal disputes. While the participants were able to successfully engage in the naming and blaming stages, many were unable to formally claim an appeal.

However, Lens (2007) study did not use an intersectional lens to examine the emergence and transformation of an injustice to a formal legal dispute. As, Orloff (2002) asserts, race, class, and gender shape public policy outcomes. Welfare policy has historically treated women, particularly white women, as full-time maternal caregivers of their children rather than workers (Orloff, 2002). However, women of color are expected to work full-time (Orloff, 2002), thus, diminishing their caregiving responsibilities. Thus, race and gender overlap to create distinct experiences for people regarding welfare policies. As a result, it is important for sociolegal and public policy research to incorporate an intersectional lens to examine disparities in how different people recognize and respond to injustices.

Conclusion

Empirical research suggests that individuals possess different experiences in the emergence and transformation of legal disputes. The different social positions individuals occupy and the associated structural constraints and differential access to power and resources create unique experiences for people in relation to law. Thus, future scholarship on the emergence and transformation of legal conflicts and disputes would benefit from using intersectionality theory as a framework with which to examine legal claims making and the various constraints different groups of individuals face in successfully making legal claims.

Additionally, Felstiner, et al. (1980) argue that, as opposed to the popular belief that the United States is an overly-litigious society, the study of the emergence and transformation of legal disputes suggests that this is not the case. Conversely, they argue that this perspective suggests that too few formal legal disputes occur in our society because most harms are never realized as such nor are most of the acknowledged harms fully transformed to disputes that are addressed by our society's legal institutions. Based on an intersectional perspective, litigation of legal disputes may be inaccessible to certain people based on their subordinated positions within society.

According to Felstiner et al. (1980), "although the emergence and transformation of disputes is personal and individualized, it has an important political dimension. Ultimately what we are concerned with is the capacity of people to respond to trouble, problems, and injustice" (p. 653). Therefore, it is important to employ an intersectional framework in examining how uniquely positioned individuals differentially recognize and respond to injustices to fully understand the structural disadvantage that individuals of certain social groups face in acknowledging and litigating legal disputes.

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Characteristics of Innovative Entrepreneurs: An Analysis at the Level of the Individual, the Firm, and the Business Environment

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Innovative entrepreneurship has been a subject of significant discursive research. Much of this research, however, is quite disparate and tends to scrutinize narrow aspects of entrepreneurial firms. This paper conducts a broad literature review to derive the overall conclusions in the study of entrepreneurial research. These areas include the psychological characteristics of innovative entrepreneurs, the organizational characteristics of innovative entrepreneurial firms, and the characteristics of a business environment conducive to innovative entrepreneurship. Individual entrepreneurs have high levels of need achievement and a great propensity for risk-taking. Innovative ventures tend to have an organic organizational structure, which are often spin-offs from larger companies. Finally, high spending in research and development, access to business services and a skilled labor force, and a collaborative culture foster innovative entrepreneurial economic sectors. This research enables policymakers and practitioners to determine the best ways to facilitate and cultivate entrepreneurial business environments. Future research should examine the influence of environmental factors on entrepreneurship and innovation.

Introduction

There is currently widespread agreement among economists from a variety of different schools of thought that innovation is extremely important to the economic growth of developed nations. It is believed to account for between 64% and 72% of the total growth in the gross domestic product of these countries (Cooke, Uranga, and Etxebarria 1998, p.1564). How best to stimulate innovation is therefore an important question for policy makers in developed countries.

Much of the literature on innovation has focused on the effects of firm size on the amount of innovation a firm can generate. There is some evidence suggesting larger firms will generally focus more on research and development than smaller firms, but it is undeniable some of the most significant innovations in recent years have come from small entrepreneurial firms (Pepall, Richards, and Norman 2008, pp. 585- 587). One example is the small firm Genentech, which helped create the field of recombinant DNA (Pepall et al

2008, p. 586). Other examples are the extremely successful websites of e-Bay and Amazon (Pepall et al. 2008, p. 586). More rigorous evidence of this trend is provided by the work of van Praag and Versloot (2007). They conduct a literature review of 57 separate studies relating to the various benefits of entrepreneurship (van Praag and Versloot 2008, p. 355). Their conclusion is larger firms typically generate more innovation overall but smaller firms tend to generate higher quality innovations (van Praag and Versloot 2007, p. 377). Quality is defined as the number of times a given patent is cited (van Praag and Versloot 2007,

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p. 377). There is also some evidence larger firms innovate more in absolute terms but smaller entrepreneurial firms innovate more on a per employee basis (van Praag and Versloot 2007, p. 337).

This trend has led to the theory that smaller entrepreneurial firms will often provide initial major technological breakthroughs which larger firms then build upon (Pepall et al. 2008, p. 586). It is also true larger firms may be less willing to generate new innovation since doing so might harm their existing product lines (Pepall et al. 2008, p. 586). So, small entrepreneurial firms do seem to play an important role in the innovation process.

Intuitively, then, it would seem increasing entrepreneurship would lead to an increase in the level of innovation in a given society. Unfortunately, the reality is somewhat more complex. Specifically, if an entrepreneur is defined as any new entrant in a market, then not all of the entrepreneurial firms will generate new innovation (van Praag and Versloot 2007, pp. 353- 354). The reason for this is there are essentially two different types of entrepreneurship. The first is Schumpeter's conception of entrepreneurship as a process through which the means of production in a given society are combined in newer and more efficient ways (1961, p. 74). Under Schumpeter's theory, all entrepreneurs necessarily generate innovation (Schumpeter 1961, p. 89). Schumpeter (2003) would later call this process of continuous innovation "creative destruction", as older methods and ideas inexorably gave way to newer ones (p. 83).

However, Kirzner (2009) points out many entrepreneurs are driven not by a desire to innovate but by the potential to make a profit from previously unrecognized price differentials (p. 147). Examples of this could include someone realizing they could use an existing but relatively unknown process to produce a given good at a price below the existing market price or someone buying goods to be sold at a higher price in the future (Kirzner 2009, pp. 147-148). This second class of entrepreneurs does not produce technological innovation as such.

Therefore, since not all those opening new businesses will be innovative, merely encouraging the formation of new businesses for its own sake is not an effective way to promote innovation. Malizia and Feser (2005) argue economic development strategies for new businesses in general should be very different from entrepreneurial business development strategies geared towards innovative entrepreneurs (pp. 202- 204). In addition, Johnson (1990) criticizes some of the research on entrepreneurship for treating all entrepreneurs and entrepreneurial firms as if they are exactly the same (p. 48). The goal of this paper is to review relevant literature in order to determine what factors specifically drive the formation of small businesses that will produce innovation so in the future research and policies can focus on encouraging innovation and economic growth. This is an issue which most existing theories of entrepreneurship do not properly address (Malizia and Feser 2005, p. 212).

This paper's analysis is divided into three broad categories: psychological characteristics of individual innovative entrepreneurs, specific organizational characteristics of new innovative firms, and characteristics of the broader business environment in which innovative new firms could be expected to develop. These categories are consistent with Johnson's argument that entrepreneurship should in the future be analyzed at the levels of the individual, the firm, and the external environment of the firm (1990, p. 48).

This analysis has several practical implications for policy-makers. The analysis of to what extent individual psychological factors motivate innovative entrepreneurs will give policy-makers a better sense of how much effect government policies could have on the level of entrepreneurship in a region. The analysis at the level of the firm will allow policy-makers to better identify and target firms which are more entrepreneurial. The analysis of the environment the firm exists in will help them determine which specific investments they should make to promote a business environment conducive to entrepreneurship.

Psychological Characteristics of Innovative Entrepreneurs

Understanding the extent to which individual psychological traits motivate innovative entrepreneurs is an important topic. First, understanding this subject creates a fuller picture of the nature of entrepreneurship. Second, this knowledge will allow policy makers to determine whether to focus on policies specifically designed to boost the level of innovative entrepreneurship in a given society. If innovative entrepreneurship is purely a function of the psychological characteristics of members of a society, then government policy should not be expected to significantly increase or decrease it. Determining the extent to which individual psychology influences innovative entrepreneurship is an endeavor with significant practical and academic implications.

Schumpeter was the first person to propose that the chief determinant of innovative entrepreneurship was individual psychology. Schumpeter (1961) argued that after an entrepreneur successfully developed a new innovation other businesses would quickly imitate it (p. 131). This would inevitably reduce the profits of the initial entrepreneur back to what they were before the innovation (Schumpeter 1961, p. 132). Schumpeter points out entrepreneurs were often in a precarious financial situation and could expect social backlash from introducing new ideas (1961, pp. 89-90). For these reasons, entrepreneurs in Schumpeter's theory were unlikely to be motivated solely by the economically rational pursuit of profit (1961, p. 92). Instead, Schumpeter argued entrepreneurs were driven mainly by a desire to create new ideas and show they were superior to others (1961, pp. 93-94).

Some more evidence on the relationship between entrepreneurship and the desire for achievement is provided by the work of McClelland (1965). He explores the effect a high level of need achievement has on an individual's decision to pursue an entrepreneurial occupation (McClelland 1965, pp. 389- 390). Need achievement is defined as the desire to meet an internal standard of accomplishment (Coon 2009, p. 380). McClelland (1965) explores this relationship by conducting a longitudinal study in which he first measures the need achievement of 55 college students at Wesleyan University in 1947 (p. 390). He then examines the occupation each of these students was in 14 years later (1965, p. 390). McClelland (1965) uses this method to eliminate the possibility of reverse causality resulting from being in an entrepreneurial position increasing an individual's need achievement (p. 390). He finds 83% of students with a high need achievement level were in entrepreneurial occupations (McClelland 1965, p. 391). In contrast, 79% of students with a low need achievement level were in non-entrepreneurial occupations (McClelland 1965, p. 391). There are, however, some potential issues with these results. The first is the sample might be unrepresentative of the population as a whole since all students in the sample attended the same university (McClelland 1965, p. 390). The second is McClelland (1965) defines an entrepreneurial occupation as any occupation that entails a high level of individual responsibility, a relatively large amount of risk, and some form of objective feedback on job performance (1965, p. 390). As a result, this category includes a large number of careers which would not involve actually starting a new company. In addition, McClelland (1965) does not distinguish between innovative entrepreneurship and other forms of entrepreneurship. Intuitively, one would assume innovative entrepreneurs were more motivated by need achievement than other entrepreneurs. This intuition is elaborated on more fully below. While this article supports the view that innovative entrepreneurs are influenced to a significant degree by psychological factors, its conclusions should be viewed with some doubt.

Since McClelland's (1965) work, a great deal more research has been done on the effect need achievement has on entrepreneurship (Johnson 1990, p. 39). This research is summarized in the work of Johnson (1990), who reviews a total of 23 studies on the subject (p. 47). Johnson (1990) first points out there is very little statistical correlation between the different measures of need achievement used in the research (p. 41). This indicates either many of the measures are inaccurate or this is a result of uncertainty over whether need achievement is a conscious or unconscious motivator (Johnson 1990, p. 41). Either way, this issue casts some doubt on the validity of much of the research exploring the link between need achievement and entrepreneurship (Johnson 1990, p. 41). Johnson (1990) also points out definitions of

entrepreneurship have varied greatly from one study to the next, which casts further doubt on any broad conclusions drawn from the research (p. 48). Despite this lack of consistency, Johnson (1990) finds that in 20 out of the 23 studies he reviews there is found to be some sort of positive relationship between the measure of need achievement and the measure of entrepreneurship used in the study (p. 47). This leads Johnson (1990) to state there is most likely a relationship between need achievement and entrepreneurship (p. 50). However, he does caution this is impossible to definitively conclude due to the issues surrounding the methodology of the existing empirical research (Johnson 1990, p. 50). Significantly for this paper, one of the studies Johnson (1990) cites found entrepreneurs who founded rapidly growing high-tech companies had significantly higher levels of need achievement than non-entrepreneurs and entrepreneurs who had founded companies with a smaller degree of growth (p. 45). The sample used in this case consisted of 134 high-tech company owners and managers (Johnson 1990, p. 45). This result appears to confirm the intuition innovative entrepreneurs would have higher levels of need achievement than other entrepreneurs.

More recent research into the psychology of entrepreneurs is provided by the work of Schindehutte, Morris, and Allen (2006). Schindehutte et al. (2006) are interested in determining how entrepreneurs respond to challenging events they encounter while running their business (pp. 355- 356). To explore this topic, they conduct interviews with 140 entrepreneurs from the United States (Schindehutte et al. 2006, p. 357). Crucially, 70 of these entrepreneurs were from innovative firms seeking to achieve a high level of growth while the other 70 were from less innovative firms with a lower level of growth (Schindehutte et al. 2006, pp. 356- 357). The interviews themselves consisted of both qualitative and quantitative questions (Schindehutte et al. 2006, p. 356). The quantitative questions consisted of statements to which respondents could give one of five responses ranging from strong agreement to strong disagreement (Schindehutte et al. 2006, p. 356). Schindehutte et al. (2006) find entrepreneurs in general tend to experience very positive emotions when successfully dealing with a challenging situation, and these positive emotions are often what helps to motivate entrepreneurs (pp. 364- 365). They also find entrepreneurs involved in innovative companies with a high level of growth tend to experience even more of these strong positive emotions (Schindehutte et al. 2006, p. 363). This adds further support to the view that psychological factors have a significant influence on innovative entrepreneurs.

The work of Stewart, Watson, Carland, and Carland (1999) provides some research on more general personality differences between innovative entrepreneurs, regular entrepreneurs, and non-entrepreneurs. The authors' goal is to compare the personalities of entrepreneurs with those of non-entrepreneurial corporate managers to better determine the psychological traits that characterize entrepreneurs (Stewart et al. 1999, pp. 190- 191). The three specific personality traits on which Stewart et al. (1999) compare entrepreneurs and corporate managers are achievement motivation, the degree to which an individual is willing to take risks, and an individual's preference for innovation (p. 192). Achievement motivation is essentially equivalent to need achievement (Stewart et al. 1999, p. 192). Stewart et al. (1999) focus on these three traits because they are the ones most commonly associated with entrepreneurs in the literature (p. 192). The initial data set Stewart et al. (1999) used for their research consisted of survey data from 767 individuals in the United States (p. 199). These individuals were first divided into non-entrepreneurial corporate managers and those who owned their own business (Stewart et al. 1999, p. 200). 342 individuals were assigned to the former category and 428 individuals to the latter (Stewart et al. 1999, p. 200). Individuals who had provided too little information to be assigned to a category were excluded from the analysis (Stewart et al. 1999, p. 200). Stewart et al. (1999) next took the 428 business owners and further classified them as either entrepreneurs or small business owners (p. 200). There were 101 individuals assigned to the former category and 324 individuals assigned to the latter, with three individuals being excluded from the analysis due to a lack of information (Stewart et al. 1999, p. 200). The authors' categories of entrepreneurs and small business owners correspond well to the respective classifications of innovative and non-innovative entrepreneurs, especially since the authors conclude entrepreneurs have a significantly higher preference for innovation than small business owners (Stewart et al. 1999, pp.

191 & 203). The authors also find entrepreneurs tend to have higher achievement motivation and a higher propensity for risk than both non-entrepreneurial corporate managers and small business owners (1999, pp. 202- 203).

These results are supported by Kreiser et al. (2002), who claim two of the three characteristics which should be used to evaluate how entrepreneurial an individual is are how risk averse they are and how innovative they are (pp. 74-8). Kreiser et al. (2002) run a confirmatory factor analysis on a data set consisting of the survey responses of 1,067 owners or CEO's of small to medium sized firms in Australia, Finland, Mexico, the Netherlands, Norway, and Sweden (pp. 81-82). This analysis supports their view that someone's entrepreneurial orientation is best evaluated along the three dimensions they specify (Kreiser et al. 2002, pp. 85-86). Kreiser et al. (2002) ask eight questions in their survey, all of them relating to either how much the company is focused on innovation (both in terms of products and in how the company operates), how proactively the company engages competitors, or how comfortable the company is with risk (p. 94). These questions are used fairly commonly in the literature on entrepreneurial innovation (Kreiser et al., 2002, p. 83). There is therefore solid evidence that entrepreneurial individuals have a higher preference for innovation and tolerance of risk than others.

There is a good deal of evidence suggesting certain psychological traits influence an individual's decision to become an innovative entrepreneur. These traits and the literature on them are summarized below in Table 1.

Table 1. Summary of Psychological Traits of Innovative Entrepreneurs

Psychological Trait	Empirical Evidence	Relevant Literature
Preference for innovation	Survey data from a variety of countries indicates entrepreneurial individuals tend to be extremely innovative.	Schumpeter (1961); Stewart, Watson, Carland, and Carland (1999); Kreiser, Marino, and Weaver (2002)
Need Achievement	Despite some measurement and definitional issues, vast majority of studies find evidence of positive relationship between need achievement and entrepreneurship	McClelland (1965); Johnson (1990); Stewart, Watson, Carland, and Carland (1999)
Positive Emotional Response to Successfully Handling Challenging Situation	Schindehutte et al. (2006) find this is significantly higher for entrepreneurs than non-entrepreneurs	Schindehutte, Morris, and Allen (2006)
Higher Propensity for Risk	Survey data from a variety of countries indicates entrepreneurs tend to be less risk averse than non-entrepreneurs.	Stewart, Watson, Carland, and Carland (1999); Kreiser, Marino, and Weaver (2002)

While the methodology behind some of the earlier research on the subject is not overly rigorous, it does seem likely that innovative entrepreneurs tend to have higher levels of need achievement and a higher propensity for risk-taking. This does not, however, imply psychological factors are the only determinants of innovative entrepreneurship. Schindehutte et al. (2006) point out innovative entrepreneurship arises from a mixture of rational decision-making and emotional elements (p. 365). This rational decision-making would presumably be affected by external factors. This is supported by Johnson (1990), who explicitly states any analysis of entrepreneurship should consider both psychological factors and external factors such as the business environment surrounding an entrepreneurial venture (p. 48). While psychological factors do seem to have a significant amount of influence over innovative entrepreneurship, they are not its sole determinants. This is important because it implies there is significant scope for policy-makers to have an impact on the level of entrepreneurship in a given region. While individuals may wish to become entrepreneurs due to certain innate psychological characteristics,

they will only act on this desire and found a company if policies that promote entrepreneurship are in place. To gain further insight into innovative entrepreneurship, external characteristics such as common characteristics among entrepreneurial firms must also be considered.

Characteristics of Innovative New Firms

The work of Carland, Hoy, Boulton, and Carland (1984) argues entrepreneurial firms tend to be qualitatively different entities than non-entrepreneurial small firms (p. 357). If entrepreneurial firms are distinct from other small businesses, then it is logical to assume they should have certain unique characteristics. An understanding of these characteristics could be used to more effectively formulate policies that stimulate innovation by helping to identify and support innovative new firms. It would also allow academic researchers to better distinguish between entrepreneurial and non-entrepreneurial small firms, thereby improving the quality of empirical research relating to entrepreneurship (Carland et al. 1984, p. 357). An in-depth examination of these characteristics is an important undertaking.

Evidence on some of the basic characteristics of innovative entrepreneurs comes from the work of Glancey (1998). Glancey (1998) examines the factors that determine the growth and profitability of small Scottish manufacturing firms (p. 18). Glancey (1998) first points out some entrepreneurs tend to be focused on aggressively expanding their business while others are content to just let their business remain at a certain size (p. 19). This corresponds roughly to the distinction Malizia and Feser (2005) make between entrepreneurs and small businesses (pp. 202-204). Glancey (1998) pays special attention to the effects this distinction has on the characteristics of firms (pp. 19-20) He argues some of the existing research on the characteristics of entrepreneurial firms could have been improved by taking this difference into consideration (Glancey 1998, pp. 19- 20). His data set consists of firm level data for 38 individual small firms (Glancey 1998, p. 22). The relatively small sample size is the result of lenient financial reporting standards for small Scottish firms (Glancey 1998, p. 22). He finds strong statistical evidence that quickly growing firms tend to be younger than other small firms (Glancey 1998, pp. 23- 26). The fact younger firms grow faster than older firms is interesting, because it could imply the experience and reputation of existing firms do not give them a sufficient advantage when they compete with innovative new firms (Glancey 1998, p. 25). Of course, it might also be a result of smaller firms having more opportunity to grow. This would be an interesting question for future research.

This trend of smaller firms growing more rapidly is not limited to Scotland. Calvo (2006) finds evidence of a negative correlation between the age of a firm and how rapidly the firm expands (pp. 118-120). His dataset consists of data on 1,272 Spanish firms during the period from 1990 to 2000 (Calvo 2006, pp. 118-120). Similarly, Goedhuys and Sleuwaegen (2010) find an inverse relationship between the age of a firm and the pace of its growth (p. 46). They use data from 947 African firms in 11 different countries (Goedhuys and Sleuwaegen 2010, p. 36). The presence of this trend in a variety of locations indicates the benefits of innovation could generally be expected to outweigh the benefits of reputation and experience. This is important for policy-makers because it indicates focusing on policies that benefit younger and less experienced firms would be an effective way to promote entrepreneurship. One way to do this might be to ensure entrepreneurs have access to business services (such as advice on marketing or logistical support) either through the free market or government provision since inexperienced entrepreneurs may have some difficulty initially running a business. This will be discussed in greater detail in the next section.

Another characteristic common of most entrepreneurial firms is their organizational structure. An example of this is the computer firm Apple, whose success as an entrepreneurial venture is widely believed to stem at least in part from the flexible and non-hierarchical structure of its organization (Covin and Slevin 1988, p. 218). Statistical evidence supporting this view is provided by the work of Covin and Slevin (1988). They are interested in determining the impact of an interaction effect between the organizational structure of a firm and how entrepreneurial

the firm is on the financial performance of the firm (Covin and Slevin 1988, p. 218). The data set Covin and Slevin (1988) use consists of survey data from 80 U.S. firms regarding how entrepreneurial the management of the firm is, how organic or mechanistic the structure of the firm was, and the firm's performance (pp. 223- 224). An organic organizational structure is one that has flexible administrative relations, is relatively informal, and in which authority is often allocated based on the degree of a knowledge an individual had in a given field (Covin and Slevin 1988, p. 219). A mechanistic organizational structure, in contrast, has rigid administrative relations, is highly formalized, and adheres tightly to bureaucratic values (Covin and Slevin 1988, p. 219). Covin and Slevin (1998) used three different regressions in their linear analysis (p. 226). The first of these featured the degree of entrepreneurial management in a firm as the only independent variable (Covin and Slevin 1988, p. 226). The second used both entrepreneurial management style and how organic a firm was as independent variables (Covin and Slevin 1988, p. 226). The final regression used both of these terms and an interaction term consisting of the product of the other two terms as independent variables (Covin and Slevin 1988, p. 226). The dependent variable in each case was firm performance (Covin and Slevin 1988, p. 226). Additionally, Covin and Slevin (1988) divided the sample into four groups consisting of entrepreneurial and organic firms, non-entrepreneurial and non-organic firms, entrepreneurial and non-organic firms, and non-entrepreneurial and organic firms (p. 227). They then used t-tests to compare the average performance of the firms in each category (Covin and Slevin 1988, p. 227). Performance was measured by asking various managers at the company Likert scale questions relating to how satisfied they were with different aspects of the organization's performance over the previous three years (Covin and Slevin 1988, pp. 225-226). As a validity check, Covin and Slevin (1988) gathered data on average sales growth for the previous three years for 20 of their firms and determined the correlation between their measure of firm performance and average sales growth was 0.82 and statistically significant (p. 226). Their regression analysis supports the view entrepreneurial firms perform better with an organic structure (Covin and Slevin 1988, pp. 227- 228). The t-tests support the view organic firms perform better with entrepreneurial managers and mechanistic firms perform better with non-entrepreneurial managers (Covin and Slevin 1988, pp. 227- 228). In a competitive economy, then, entrepreneurial firms without an organic structure would be expected to either become more organic or be driven out of the market due to competition from more organic entrepreneurial ventures. This will result in a general tendency for entrepreneurial firms to have an organic structure.

This tendency of entrepreneurial firms to have organic structures is supported by Balabanis and Katsikea (2003), who find evidence firms with an organic structure are likely to be more entrepreneurial than firms with a mechanistic structure (p. 246). They use survey data collected from 82 British export firms (Balabanis and Katsikea 2003, p. 240). The key lesson for policy-makers in this is to consider the degree to which firms have an organic organizational structure when determining which firms should receive grants to promote entrepreneurship such as Small business Innovation Research (SBIR) awards. SBIR awards are grants given out by the Small Business Administration to small firms that engage in R&D with potential for commercialization to specifically further innovation and entrepreneurship (Small Business Administration 2013). Knowing which type of organizational structure would make entrepreneurial firms more successful could help policy-makers distribute SBIR awards more effectively.

The work of Niosi and Zhegu (2010) provides evidence of a characteristic common to many innovative entrepreneurial firms. Their goal is to shed more light on the characteristics of anchor firms (Niosi and Zhegu 2010, p. 264). They define anchor firms as large, research oriented organizations that play a major role in helping to form a cluster of related firms in a given area (Niosi and Zhegu 2010, p. 267). Of interest for this work is one of the main ways they believe anchor firms contribute to the growth of a cluster is by allowing their employees to separate from them and form small firms known as spin-offs (Niosi and Zhegu 2010, p. 267). These spin-offs are typically characterized as being highly innovative, and as such should be considered to be innovative entrepreneurial firms (Niosi and Zhegu 2010, p. 282). To test their hypotheses on anchor firms, Niosi and Zhegu (2010) examine data from the U.S. aircraft industry (p.268). Their

main data set consists of data on 26,533 U.S. patents listing the “Aeronautics and Astronautics” category as their main technological domain (Niosi and Zhegu 2010, pp. 268). This data ranged from the year 1900 to the year 2004 (Niosi & Zhegu 2010, p. 275). They supplement this data with information from other sources such as U.S. government bodies, trade associations for the aircraft industry, and several private publications on technical matters relating to the aircraft industry such as Mondey and Taylor’s *The New Illustrated Encyclopaedia of Aircraft* (Niosi and Zhegu 2010, p. 268). They do not actually perform any statistical analysis on their data, instead simply examining it directly. They find the number of innovative firms in a given cluster usually increased in the decade after a major anchor firm became established in that cluster (Niosi and Zhegu 2010, p. 274). For instance, in the decade after the relatively large firm known as the Douglas Aircraft Company came to a cluster of aircraft related firms in California roughly 30 other innovative firms appeared in that cluster (Niosi and Zhegu 2010, p. 274). Similarly, the decade after the large Curtiss-Wright Corporation established a presence in a cluster of firms related to the aircraft industry in New York saw the total number of innovative firms in that region increase from 17 to 42 (Niosi and Zhegu 2010, p. 274 & 277). This trend can be seen as an example of agglomeration economies, in which firms experience additional benefits when clustering together in a region (Malizia and Feser 2005, pp. 95-96). While it is true not necessarily all of these innovative firms spun off from the anchor firms, Niosi and Zhegu (2010) nevertheless conclude spinning off companies is an important way in which anchor firms increase the total number of innovative firms in a given area (p. 282). For the purposes of this analysis, this implies that while not all innovative entrepreneurs will be spin-offs, virtually all spin-offs will be innovative entrepreneurs.

These results do not only hold for the aircraft industry. For instance, the large pharmaceutical company Glaxo Wellcome (now known as GlaxoSmithKline) spun out several innovative entrepreneurial firms in the late 1980’s (Malizia and Feser 2005, p. 207). This trend continues to the present day, with the entrepreneurial venture Oriel Therapeutics being spun out of GlaxoSmithKline in 2002 and the company Convergence Pharmaceuticals Ltd. being spun out in 2010 (Teotten Diagnostics, Inc., n.d.) (Gormley 2010). This suggests the trend of spin-off companies being relatively innovative is true over a wide range of industries. It is important to note in cases where firms spin off from publically traded companies the shareholders of the parent company will have equity in the spin-off (Bragg 2002, p. 485).

More rigorous empirical evidence for this trend is provided by the work of Xue and Klein (2010). They seek to both create an index variable measuring the level of entrepreneurship in a region and then determine which factors affect this variable (Xue and Klein 2010, p. 292). Their data set consists of state level data relating to the biotechnology and information communication technology industries in a given state (Xue and Klein 2010, p. 297). They construct their index variable for entrepreneurship by running a confirmatory factor analysis on four variables they believe reflect the level of entrepreneurship in a state (Xue and Klein 2010, p. 297). These variables are the number of technology patents produced in that state, the number of SBIR awards awarded to firms in that state, the level of venture capital investment in that state, and the number of existing technology establishments in that state (Xue and Klein 2010, p. 297). Xue and Klein’s (2010) data is drawn from the time period between 2000 and 2004, but the data is cross-sectional with values for a variable from multiple years being averaged together (pp. 298-299). They then use the results of their confirmatory factor analysis to derive the formula they use to assign each state a score for their entrepreneurship index variable (Xue and Klein 2010, p. 300). They next run three ordinary least squares regressions, the first featuring their index variable for entrepreneurship as the dependent variable (Xue and Klein 2010, pp. 304-305). The second uses the log transformation of this variable as the dependent variable, and the third uses the log transformation of this variable as the dependent variable with a more restricted set of independent variables (Xue and Klein 2010, pp. 304-305). Significantly, these regressions indicate the presence of an anchor firm in a region will increase the level of entrepreneurship in that region (p. 305). Because the authors’ measure of entrepreneurship is focused heavily on innovative entrepreneurship, this finding suggests entrepreneurial ventures which spin off from larger anchor firms will tend to be quite innovative in a variety of industries. An important point

for policy-makers that stems from this discussion is to ensure the regulatory environment is such that individuals are able to spin off firms relatively easily. One way to do this might be to post online an informational guide on what spinning off from a larger company entails.

In conclusion, entrepreneurial firms will tend to be larger and younger than other small businesses. These characteristics can be seen as a reflection of the desire for entrepreneurial firms to grow and innovate. Entrepreneurial firms will also face strong market pressure to adopt an organic organizational structure, as this structure will optimize their both their performance and ability to innovate (Covin and Slevin 1988, pp. 219 & 229). Finally, entrepreneurial firms will often be spin-offs from larger anchor firms which have set up branches in a given region. Table 2 provides a summary of these results. These results will allow policy-makers to better target promising entrepreneurial firms for grants such as the SBIR awards mentioned above. They will also allow policy-makers to better ensure the environment in a given region is suitable for entrepreneurial firms. The latter is discussed in detail below.

Table 2. Summary of Organizational Characteristics of Entrepreneurial Firms

Organizational Characteristic	Empirical Evidence	Relevant Literature
Entrepreneurial firms tend to be younger and larger than non-entrepreneurial firms	Evidence for this can be found among Scottish, Spanish, and African firms.	Glancey (1988); Calvo (2006); Goedhuys and Sleuwaegen (2010)
Entrepreneurial firms tend to have a more organic structure (implying greater flexibility and informality) than non-entrepreneurial firms	Support for this can be found in data from U.S. firms and British export firms.	Covin and Slevin (1998); Balabanis and Katsikea (2003)
Firms that spin-off from larger businesses in a region are quite often entrepreneurial	Strong evidence for this can be found in sectors of the U.S. economy ranging from aircraft manufacturing to biotechnology.	Xue and Klein (2010); Niosi and Zhegu (2010)

Environmental Characteristics Conductive to Entrepreneurship

Xue and Klein (2010) note there is currently a substantial body of literature pointing out entrepreneurial activities tend to cluster in certain regions, and this trend is especially pronounced for innovative entrepreneurs (p. 292). This implies these areas have specific characteristics which can foster innovative entrepreneurship. Identifying these characteristics is important from a practical standpoint because doing so will allow economic developers to better create place-oriented strategies for economic growth, which are often believed to be one of the most effective ways to boost entrepreneurship (Malizia and Feser 2005, p. 208). Determining which regional characteristics generate innovative entrepreneurship is important intellectually because doing so gives a more complete analysis of innovative entrepreneurial firms (Johnson 1990, p. 48).

One of the regional characteristics that plays a significant role in boosting entrepreneurship is the presence of an educated and skilled workforce. Niosi and Zhegu (2010) find evidence of this in their analysis of clusters in the U.S. aircraft industry from 1900 to 2004 (p. 269). They find the reason so many aircraft manufacturing clusters were located in the northeastern region of the U.S. in the first decades of the 1900's was because that region's workforce had the necessary skills for aircraft manufacturing (Niosi and Zhegu 2010, p. 275). Given how intertwined aircraft manufacturing clusters are with high levels of innovative entrepreneurship, this supports the idea of a skilled workforce being important for innovative entrepreneurship.

This idea is further supported by evidence from U.S. biotechnology firms. Bagchi-sen and Smith (2008) point out that in a U.S. survey of 94 small to medium sized enterprises in the biotechnology industry, the degree of skill possessed by the local workforce is viewed as the

most important reason for being located in a given area by 60.5% of research-oriented firms (pp. 10, 13 & 22). Research-oriented firms are defined as firms with either no products or only a single product on the market, as their main focus is typically on research and development instead of bringing products to market (Bagchi-sen and Smith 2008, pp. 2 & 11). These research-oriented firms are typically relatively new start-ups, and as such fit into the category of innovative entrepreneurs (Bagchi-sen and Smith 2008, p. 2). This represents a broad base of evidence supporting the conclusion that a skilled and educated workforce is important to the development of innovative entrepreneurship.

This suggests policy-makers should have creating an educated and well-trained workforce in a given region as a top priority. One way to do this might be to increase funding for local universities. Bramwell, Nelles, and Wolfe (2008) find the majority of firms in the ICT cluster in Waterloo, Canada cite the presence of a skilled workforce created by the University of Waterloo to be the main reason why they located to the region (p. 104). Increasing university funding would allow universities to create a larger and better educated workforce. This would draw more entrepreneurial firms to the region.

Another important contributing factor to the development of innovative entrepreneurship is the presence of a network of business services that can aid entrepreneurs (Malizia and Feser 2005, p. 208). Business services are essentially services which help entrepreneurs manage the technical, legal, financial, and marketing issues inherent in running a business (Malizia and Feser 2005, p. 201). The importance of these business services is underscored by the work of Waxell (2009), who examines the role business services, which he labels complementary agents, play in the Swedish biotechnology cluster at Uppsala (pp. 1606- 1607). Waxell (2009) both examines the number of business services offered in this cluster and interviews employees at biotechnology firms and business service firms located there (pp. 1616-1617). He concludes business services are especially important to innovative start-up companies because these are often too small to permanently hire employees for managing non-research activities (Waxell 2009, pp. 1616- 1617). This is supported by a case study from an information and communications technology cluster in Waterloo, Canada (Bramwell et al. 2008, p. 102). This study found the most important function of the Communitech Technology Association was to allow companies to share information on how to best run their businesses (Bramwell et al. 2008, p. 112). This organization was most important for small start-up firms (Bramwell et al. 2008, p. 112). The Communitech Technology Association can be seen as to some extent taking the place of business consulting firms, an important component of business services.

Access to business services therefore seems to be an important environmental factor in boosting the level of innovative entrepreneurship. This is especially true given the finding in the previous section that entrepreneurial firms tend to be younger and less experienced than non-entrepreneurial firms. This lack of experience would imply entrepreneurial firms may not necessarily be able to perform some functions of business as well as experienced firms that have been engaging in them longer. Policy-makers should endeavor to either attract private business service providers to a region or to provide such services directly. A good model for policy makers to learn from in this regard would be the Canadian government's policy on training programs at the technology transfer offices of some Canadian universities (Rasmussen 2008, p. 515). These training programs better educate the staff at technology transfer offices on how to advise people on successfully running a business, and appear to be filling the need for individuals with this skill set (Rasmussen 2008, p. 515).

While access to a skilled labor force and business services are important environmental contributors to entrepreneurship, innovation ultimately depends on the generation of new ideas. The number of new ideas, in turn, depends heavily on the level of existing knowledge in an area (Pakes and Griliches 1987, p. 56). The level of existing knowledge in an area is often represented as being equivalent to the expenditure on research and development in that area (Pakes and Griliches 1987, p. 56). Therefore, the level of R&D spending in an area would be expected to have a strong, positive effect on the level of innovative entrepreneurship in that area. Xue and Klein's (2010) statistical analysis of entrepreneurship in U.S. states provides evidence confirming this intuition (p. 305). Specifically, Xue and Klein (2010) find federal R&D spending in a state has

a statistically significant and positive impact on the level of entrepreneurship in that state (p. 305). The level of R&D spending in a state appears to be an important environmental factor in determining the level of innovative entrepreneurship in that state.

It should be noted there is some potential for reverse causality between R&D spending and entrepreneurship. However, Romijn and Albaladejo's (2002) analysis of small British software and electronics firms finds, while some reverse causality may be present, public R&D does have a positive causal effect on innovation (pp. 1064-1065). They go on to describe public R&D to encourage new start-up firms as "vital" (Romijn and Albaladejo 2002, p. 1065). This provides strong evidence for policy-makers that boosting public R&D spending will increase innovation, entrepreneurship, and economic growth.

It is also important to have a culture that supports innovation and entrepreneurship. Dramatic evidence of this can be found in the work of Saxenian (1994), who compares the economic performance of the computer industry clusters located at Silicon Valley in California and Route 128 in Massachusetts. Saxenian (1994) points out both of these regions had quite similar levels of a variety of economic indicators, including the education and skill of their respective workforces (pp. 3-4). However, the level of innovative entrepreneurship was generally much higher in Silicon Valley than along Route 128 (Saxenian 1994, p. 64). In 1981, for instance, venture capitalists along Route 128 funded only 17 new companies (Saxenian 1994, p. 64). In contrast, venture capitalists in Silicon Valley funded 37 new companies that year (Saxenian 1994, p. 64). Saxenian argues this regional difference is due to differences in the regional cultures of Silicon Valley and Route 128 (1994, pp. 59- 64).

Saxenian (1994) first points out many individuals in Silicon Valley would tend to discuss business matters and cooperate a great deal with each other outside of work (pp. 31- 33). This was even true when the companies they owned or worked for were technically competitors (Saxenian 1994, pp. 31- 33). In addition, many competing businesses would often directly share information and cooperate with each other (Saxenian 1994, pp. 33 & 45- 46). These high levels of formal and informal cooperation and information-sharing ensured important new technological knowledge was rapidly spread throughout Silicon Valley (Saxenian 1994, p. 33). They became an essential source of knowledge for innovative entrepreneurs in Silicon Valley (Saxenian 1994, p. 33). Silicon Valley also had a culture which strongly encouraged people to change jobs or form new companies relatively frequently (Saxenian 1994, pp. 34- 36). These social trends strongly encouraged innovative entrepreneurship in Silicon Valley (Saxenian 1994, p. 39).

The culture of Route 128 provided a sharp contrast to that of Silicon Valley. Firms along Route 128 were generally very insular, with competing firms and even individuals from competing firms rarely sharing information or cooperating either formally or informally (Saxenian 1994, p. 59). Additionally, there was a high degree of social pressure for an individual to only work for a single company during their lifetime (Saxenian 1994, p. 75). This pressure was so strong those who did quit their job and work for another company were viewed as outcasts and pariahs by their former coworkers (Saxenian 1994, p. 75). These social trends greatly reduced the level of innovative entrepreneurship along Route 128 (Saxenian 1994, pp. 62- 64).

The main lesson from this comparison of Silicon Valley and Route 128 is that the general culture of a region can have a dramatic effect on the level of innovative entrepreneurship in that region. A region may have a skilled workforce, a high level of R&D spending, and many other characteristics favoring innovative entrepreneurship, but without a supportive culture it may still not develop the appropriate level of innovative entrepreneurship. Currently, it is unclear what steps (if any) policy-makers should take to promote a more entrepreneurial culture. This is an important area for future academic research.

Further evidence for the important role an open culture can play in stimulating entrepreneurship in a region is provided by Todtling, Prud'homme van Reine, and Dorhofer (2011), who point out the open and tolerant culture in Eindhoven, NL was critical in attracting entrepreneurs to that region (p. 1891). This open culture was in large part due to the efforts of the private company Philips, which actively encouraged collaborative research between many different actors (Todtling et al. 2011, p. 1890). Todtling et al. (2011) conclude by arguing that

while policy actors such as regional governments do have a crucial role to play promoting an open and collaborative regional culture, they must tailor their policies to the specific region in question (pp. 1904-1905). This is an important point, as it cautions policy-makers against simply applying policies from one region to another without careful consideration.

In conclusion, the business environments where innovative entrepreneurship tends to flourish will have skilled workforces, numerous supporting business services, high levels of R&D spending, and a culture supportive of collaboration and information sharing. Regional economic developers should focus on implementing policies that increase these factors. Table 3 summarizes these environmental characteristics and the corresponding literature.

Table 3. Summary of Environmental Characteristics of Entrepreneurial Regions

Environmental Characteristic	Empirical Evidence	Relevant Literature
Skilled labor force	Cluster formation in the aircraft and biotechnology industries is strongly influenced by the presence or absence of a skilled labor force	Niosi and Zhegu (2010); Bagchisen and Smith (2008); Bramwell, Nelles, and Wolfe (2008)
Network of business services	Case studies in biotechnology and ICT clusters both indicate providers of business services are extremely important to entrepreneurial firms in them	Waxell (2009); Bramwell, Nelles, and Wolfe (2008); Rasmussen (2008)
High research and development (R&D) spending	Evidence drawn from the U.S. suggests higher R&D spending will result in more knowledge (and more innovative entrepreneurship) being in a region	Pakes and Griliches (1987); Xue and Klein (2010); Romijn and Albaladejo (2002)
Culture supportive of entrepreneurship	A more open and entrepreneurial culture is associated with increased innovation and entrepreneurship in clusters both in the U.S. and Europe	Saxenian (1994); Todtling, Prud'homme van Reine, and Dorhofer (2011)

Conclusion

This paper has examined an array of literature characterizing innovative entrepreneurs at the levels of the individual, the firm, and the broader business environment. On the individual level, innovative entrepreneurs tend to be motivated by a mixture of rational decision-making and psychological trends (Schindehutte et al. 2006, p. 365). Chief among these psychological trends are need achievement, a propensity for risk-taking, and a desire to innovate. Innovative entrepreneurial firms tend to be larger and younger than non-innovative new firms, and usually have a more organic organizational structure. Many are also spin-offs of larger firms. Finally, innovative entrepreneurs will usually be found in regions with a skilled workforce, access to supporting business services, a high level of R&D spending, and a culture that promotes collaboration and information sharing.

Academically, this paper represents a response to Johnson's (1990) argument that entrepreneurship should be analyzed at the levels of the individual, the firm, and the external environment (p. 48). As such, it summarizes and organizes existing literature on innovative entrepreneurship into this framework, and provides a useful starting point for future research on the subject.

From a policy perspective, this paper gives regional developers a better picture of innovative entrepreneurs and the environments that support them. It also gives policy makers concrete ways

to boost entrepreneurship in an area. For instance, policy-makers could increase R&D spending in that area or make it easier for companies to spin off from larger firms. It provides policy-makers with valuable tools to let them better target their policies towards firms more likely to be entrepreneurial. This paper finally cautions policy makers to expect some variability in the success of such policies due to the extent by which innovative entrepreneurship is determined by psychological traits.

This analysis indicates several different directions for future research and policy formation. Academic research into the psychological characteristics of entrepreneurs should focus on how often the rational side of entrepreneurs comes into conflict with their personality traits and what the outcome is. This will provide important insight into the extent to which entrepreneurs are motivated by internal factors. From a policy standpoint, research might be conducted into what environmental features are attractive to entrepreneurial personalities so regions can better attract entrepreneurs.

In terms of the organizational characteristics of entrepreneurial firms, one avenue for academic research would be to determine whether the characteristics identified in this analysis cause other firms to be more entrepreneurial or whether more entrepreneurial firms tend to naturally develop these characteristics. Policy-makers should focus more on crafting policies that create a supportive environment for firms with these characteristics.

Table 4. Summary of Implications for Future Research and Policymaking

Area	Directions for Future Research	Policy Implications
Psychological characteristics of entrepreneurs	Determine extent to which entrepreneurs are influenced by psychological traits as opposed to rationality	Develop strategies to make areas more attractive to individual entrepreneurs
Characteristics of entrepreneurial firms	Determine whether the identified characteristics cause firms to become more entrepreneurial or vice versa	Create an environment conducive to firms with entrepreneurial characteristics
Environmental characteristics of entrepreneurial regions	<ul style="list-style-type: none"> • Explore the distinction between generic and industry specific skills • Identify the reasons for a strong business services sector • Analyze how to measure entrepreneurial culture and ascertain its determinants • Continue to examine direction of causality between entrepreneurship and R&D spending 	<ul style="list-style-type: none"> • Ensure members of the workforce have access to education and training programs • Ensure entrepreneurial firms have access to business support services (private or otherwise) • Increase R&D spending

The implications of the research on environmental characteristics of entrepreneurial regions are more varied. An interesting topic for academic research relating to a skilled workforce would be to look at the differences between industry specific skills and more generic skills (such as how to prepare an effective presentation). Policy-makers, on the other hand, should focus on ensuring workers in their region have adequate access to educational and training programs. In terms of business services, academic research should focus on how a strong business services sector arises in a given region. In the absence of a strong private business services sector, policy-makers should ensure entrepreneurs have access to support services such as business incubators. There

are a great deal of potential issues relating to entrepreneurial culture for academic researchers to explore, such as how to accurately measure entrepreneurial culture and what its determinants are. Implications for policy-makers on this subject are still somewhat dependent on what future academic research determines. Finally, academic research into the effect of R&D spending on entrepreneurship should seek to determine the direction of causality in the relationship between the two. If R&D spending does boost entrepreneurship, policy-makers should endeavor to raise the level of R&D spending in their region. Table 4 summarizes these conclusions.

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Pay for Spray Fire Protection Policy: A Case Study of Obion County, Tennessee

Policy Brief

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Obion County, Tennessee's subscription fire protection policy, "Pay for Spray," has created a dangerous problem in which unincorporated areas of the county do not have a mandatory universal fire protection service. This policy threatens both life and property. Two fires that occurred in September 2010 and December 2011 left residents without fire protection subscriptions homeless. Thirteen policy alternatives are presented and seven are evaluated along four criteria: political feasibility, financial feasibility, economic efficiency and quality of service. After an in-depth evaluation, it is proposed that Obion County make the purchase of fire protection service mandatory through property taxes.

Defining the Problem

Located in the rolling hills of northwest Tennessee, Obion County has a total area of 555 square miles and population of about 31,870 people. There are a total of 14,659 housing units in the county, and 13,077 are occupied (U.S. Census Bureau, 2010a). More than half of the total population (19,588) lives in rural areas with only 12,219 people living inside urban areas (U.S. Census Bureau, 2010c). The median household income (in 2010 inflation adjusted dollars) is \$39,543 and the per-capita income for the county is \$21,235. About 14.9% of the total population lives below the poverty line (U.S. Census Bureau, 2010b). The location of Obion County is shown in Figure 1.

Although there are a total of 52 municipalities, only nine are incorporated: Hornbeak, Obion, Rives, Samburg, South Fulton, Troy, Union City, Woodland Mills and Kenton. There are a total of eight municipal fire departments that are located in Hornbeak, Kenton, Obion, Rives, Samburg, South Fulton, Troy and Union City. Union City Fire Department is the only full-time staffed department in the county and has operated this way for over 47 years. The other seven departments rely on volunteers. Obion County is one of two counties in the state that does not provide fire protection. County residents pay county taxes, but no tax dollars go towards fire coverage. The eight municipal departments are

funded by each of their cities' taxpayers (Statter,, 2010a).

The focus of this policy brief is the City of South Fulton's subscription fire protection policy, more commonly referred to as "Pay for Spray." This policy states that any residents living outside the city limits and not within the purview of any other city or county fire department have the option to pay an annual fee of \$75 for fire protection from the South Fulton Fire Department (SFFD). SFFD responds to about 250 rural fire calls within a 12-month period, accounting for about 75% of its total calls. In addition to SFFD, two other departments, Kenton and Union City, also offer services on a subscription basis in an attempt to help the rural residents. The five remaining departments offer services on an as-needed basis, without a subscription or ability to pay for response. For example, the fire department of Rives does not charge a subscription fee, but sends a \$500 bill after it has rendered services. According to Fire Chief Bob Reavis of Hornbeak, "half of the homeowners fail to pay" (Sisson,

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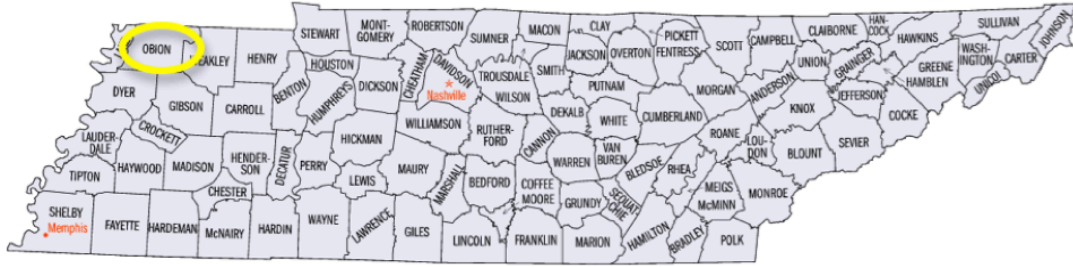


Figure 1: Tennessee Counties

2010). Unfortunately, this is not uncommon. Less than 70% of people pay in communities with subscription fees for firefighting (Sisson, 2010). The reason the three departments charge a fee is because city government officials do not feel it fair to take the city taxpayers' money and service and give it to county residents for free (Statter, 2010a). Union City Fire Chief Kelly Edmison says they get very little help from their own city and zero revenue from the county. Financially, these departments will be forced to either switch to a subscription-based service model or draw back into their respective city limits. If that happens, there will not be any fire protection in three quarters of the county (Statter, 2010a).

The three subscription-based departments do not respond to fires on rural properties that do not pay for subscription fire service, unless there is a report of someone trapped inside. The State of Tennessee guarantees two services to taxpayers: garbage collection and law enforcement. Chief Edmison states that in this county, "Fire service is not considered that important. What people need to know is the fire problem in Obion County is not a city problem; it is a county problem" (Statter, 2010a).

In Obion County, the average distance traveled from a station to a rural fire scene is 5.07 miles and the average response time is 11.14 minutes (Town of Troy, 2008). This does not include areas that rely on fire departments from outside the county for their fire protection, or the 15 square miles of southwestern Obion County that have no fire protection. According to SFFD Chief David Wilds, this area is sometimes referred to as "Cat's Corner." This policy has created a dangerous problem in which unincorporated areas of Obion County do not have a mandatory universal fire protection service in place – a policy that threatens both life and property. The nine incorporated municipalities, eight fire departments, and seven districts were created from Census tract subdivision data using Geographical Information System (GIS) software, ArcMap. These data have been plotted in Figure 2.

The SFFD Pay for Spray policy was in place for almost 20 years without many notable incidents. However, when the Cranick family home burned to the ground on September 29, 2010, the county policy earned media attention. In response, on September 29, 2010, the Obion County Court voted 15 to 3 in favor of implementing countywide subscriptions. The county would collect fees at the courthouse and distribute them to the eight municipalities. Beginning July 2011, all fire departments in the area required residents to pay an annual fee, including five departments that answered calls at no charge (Statter, 2010b). Fire Chief Bob Reavis of Hornbeak opposed the expansion of the policy arguing that more houses would burn: "It's a public safety issue; subscriptions should be left to newspapers and magazines," Reavis said (Sisson, 2010). Mayor Benny McGuire observed that only one-third of Obion County had access to rural fire service before the vote, and felt that the commission's decision would extend fire protection services to everyone, but at a price. McGuire said it is "probably the best we can do." At the conclusion of the meeting, many firefighters expressed disappointment, but said they will abide by the Commission's rules. "It's not the right thing to do but I've been doing it too long to quit," said Stan Mitchell, a volunteer firefighter with the Rives Fire Department (Sisson, 2010).

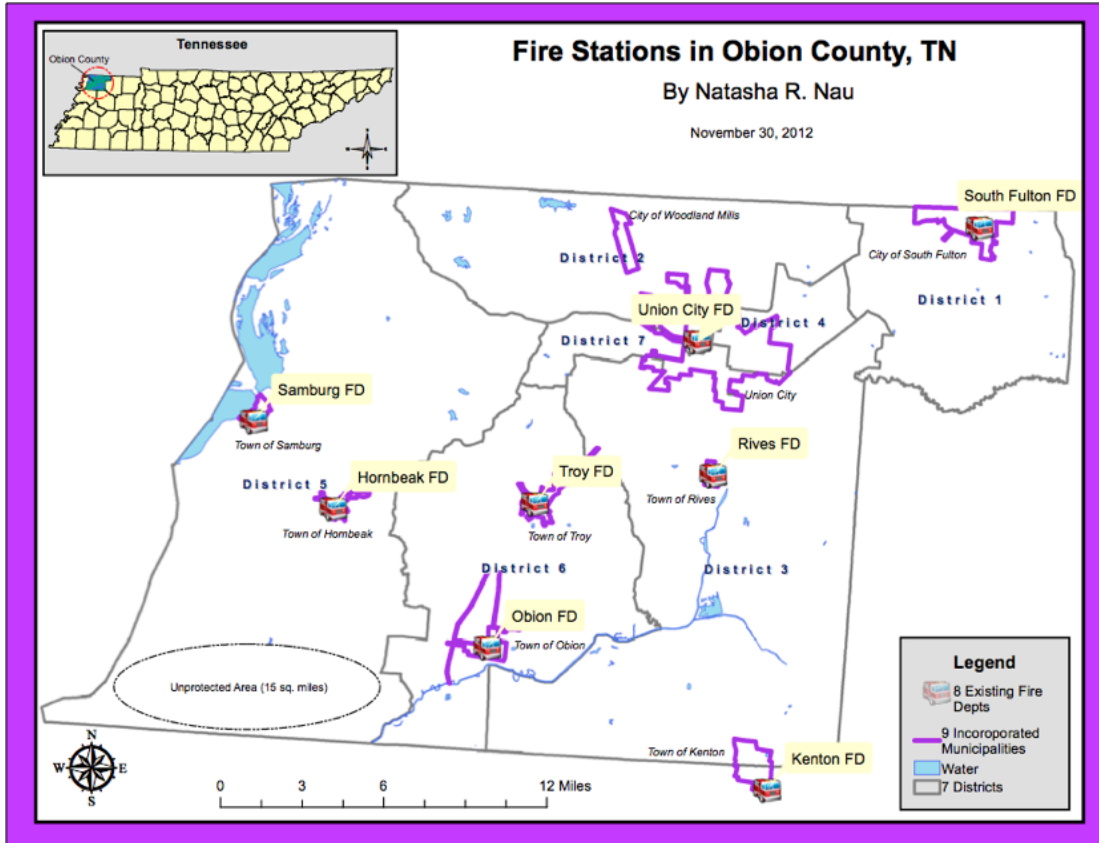


Figure 2: Obion County, Tennessee

Commissioners also approved a fire tax referendum to be placed on the 2012 General Election ballot. The county could petition the state for a “public act” which would allow Obion County to set up its own fee structure independent from Tennessee fire tax code. This is possible and should be investigated (Statter, 2010b).

The subscription expansion was a positive step in attempting to get the necessary funds into the right hands, but then a second devastating fire on December 6, 2011 destroyed the Bell family trailer home, sparking more debate. Due to the tremendous controversy that ensued over these two fires, it is apparent that the countywide subscription decision did not solve the problem. Between the annual frequency of rural fires and the square mileage that needs to be covered, fire departments cannot continue to operate using a subscription-based system. Price conscious residents may be more inclined to take risks and less likely to pay the subscription fee. Two such residents did just that, and later paid the price. The county's mayor, Benny McGuire, said he “sympathized with the families whose houses burned down,” but felt that “it was an economic issue [where] only those who subscribe get served” (Sisson, 2010). This policy brief argues that it is too dangerous to give homeowners the freedom to choose.

Fire service is a basic life and property saving emergency service. After Benjamin Franklin formed the first fire insurance company in 1751, subscription-based fire services were common practice. Large cities formed fire brigades to protect insured structures. Subscribers paid for fire service in advance, and insured structures would receive a fire mark to delineate against uninsured structures. Payments for fire marks directly supported firefighting companies. Volunteer fire departments were also common. Some fire insurers contributed money to volunteer departments, and awarded bonuses to engines that arrived first at the scene of a fire (Murphy, 2010).

According to the U.S. Fire Administration (USFA) (2012), modern subscription-based services insure large fire or medical emergency fees. Fire protection is offered by subscription much less frequently than are emergency medical services (EMS). The Tontitown Area Volunteer Fire Department in Arkansas is an example of a volunteer department that uses subscription fire services. The department covers 35 square miles, protects 2,500 people, and responds to about 125 calls for fire and medical assistance each year. Non-members are charged \$200 for the first hour of fire department operations, and \$100 for each additional hour. These charges are often recovered through insurance payments. The fire department may, under Arkansas law, place a lien against a property for failure to pay, but this has never been necessary. Tontitown's subscription fee structure is split into two components: (i.) an initial fee set at \$100, which covers entry into the fire association and the first year's dues, and (ii.) an annual fee set at \$25 a year to maintain membership. It is estimated that approximately 60 percent of residents are members of the subscription program. The annual subscription fees raise more than \$20,000 for the department, and fund departmental operations out of two stations (USFA, 2012).

The issue of whether or not fire protection is a public or private good underlies this debate. The consumption of fire services does not fit the description of a true public good because its service flow is localized and can be largely captured by the individual consumer. In a sparsely populated area, fire protection benefits the immediate individual or family concerned. In a densely populated community, however, dwellings adjacent to the one in which the fire originated may receive some of the benefits. Therefore, depending upon the density of the community, the consumption of fire services may be considered something between a private and quasi-public good (Ahlbrandt, 1973). In Obion County, access to this "public" good is geographically limited. Fire protection is largely a private good because it is farm homes that often catch fire and leave others unaffected. According to Fire Chief Gary Morris from Arizona, "[People] just want to know that when help is needed it will be there" (Stanek, 2007). The utilitarian philosophy embedded within the pay for spray policy is akin to the "new public management" movement, where citizens are customers and the government is just another type of service provider.

While subscription fee systems have certain advantages - such as a conservation of fire department resources and a lower cost to the residents than property taxes - there are an overwhelming number of disadvantages. When homeowners forget to pay, or choose not to pay, they are endangering their safety. Another flaw in the subscription service model is the possibility of dispatch erring in directing units not put out a fire when the owner actually paid the fee. This would open up the possibility for lawsuits against the county. Different types of liabilities including criminal, strict, foreseeability and negligence can result in lawsuits against the fire department, the municipality, or the county as a whole (Cassidy, 1992). The current subscription provision must be changed because it is a threat to public safety. Something needs to be done to address this issue and it needs to be done quickly before more loss is incurred.

Evaluation Criteria

In evaluating the policy alternatives to the current subscription service for fire protection in Obion County, four criteria have been selected: political feasibility, financial feasibility, economic efficiency and quality of service. In general, a policy is feasible if it is capable of being done or being accomplished. Feasibility is likened to probability, likelihood and suitability. The criteria are discussed in further detail below.

- *Political feasibility* entails the extent to which officials, policymakers and the public are willing to accept and support a particular fire protection policy. This is arguably the most critical criterion because even if a policy appears to be feasible in all other aspects, it will not pass if it cannot garner support with the necessary votes.
- *Financial feasibility* examines whether a fire protection policy is viable after taking into consideration its total costs, such as the construction of new fire stations, the hiring of

personnel, the purchase of equipment and the size of the town, city or county budget. If the associated municipality can fund the costs of the policy in its budget or if it can be supplemented through other resources, then the policy is financially feasible. Financial feasibility is about minimizing risk and eliminating the chance of loss. Simply, can the town or county afford this? Sustainability is considered a sub criterion of financial feasibility in that the organization wants to know whether a policy will be financially feasible in the long run.

- *Economic efficiency* refers to the optimal allocation and use of resources that maximizes the public provision of fire services and minimizes waste. A fire protection policy is economically efficient if it calls for the purchase of resources and the management of personnel in a way that provides its services at the lowest possible cost to the municipality and its residents. One fire protection system is considered to be more efficient than another if it can provide more services for society without using more resources.
- *Quality of service* for local fire operations can be assessed by comparing performance to a standard performance level or benchmark. Benchmarks vary and can be based on comparable technical standards, historical data or specific organizational priorities. A standard performance level is average response time, which is composed of turnout time and travel time. The National Fire Protection Association (NFPA) has three known standards for response time: NFPA 1221, 1710 and 1720. NFPA 1221, the Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems, states that alarm handling and dispatch time should take 1 minute 95 percent of the time and applies to both career and volunteer operations. NFPA 1710 is the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments. It states that “turnout time,” which involves the notification of alarm, suit up and the apparatus leaving the station should take 80 seconds. The first company on scene should arrive within 4 minutes. All companies assigned on first alarm should arrive within an 8-minute interval. Shorter response times can be expected in urban areas compared to rural areas because of the number of facilities - such as fire stations - within the community. Rural areas often have less access to facilities. This urban and rural difference must be considered when comparing response times across communities. The average distance traveled from a station to a rural fire scene in Obion County is 5.07 miles and the average time is 11.14 minutes (Town of Troy, 2008). The average residents per square mile ranges from 23 to 387 (see Table 3). Accordingly, Obion County currently abides by NFPA’s “Volunteer standard” 1720.

Table 1: Fire Response Times

Population Protected	Minimum Staff	Response Time (mins)
>1,000 people/mile ²	15	9
500 - 1,000 people/mile ²	10	10
<500 people/mile ²	6	14
Travel distance ≥ 8 miles	4	14

Note: NFPA 1720, the Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Volunteer Fire Departments, has no standard for turnout time but does implement these standards to estimate travel time (Flynn 2009).

Other Quality of Service variables may include the time taken to control the fire, time spent on scene, and the amount of training and certifications that responding firefighters possess. It is often assumed that a high percentage of responders who complete training and certification provide high-quality service. However, different departments require different levels of training. A department with a fully up-to-date training may not provide as high-quality service if it has fewer requirements for training. In order to limit the scope of this policy brief, Quality of Service will only refer to average response times.

Policy Alternatives

The following is a list of the thirteen alternative fire protection policies that are being proposed for consideration when searching for a solution to this imminent problem for the South Fulton Fire Department and the other seven departments within Obion County.

1. No change
2. Change the pricing model
3. Get insurance companies to price policies lower
4. Make fire insurance mandatory
5. Set up a "fire insurance" system
6. Create a new career department
7. Create a combination department
8. Create a new volunteer service with a small number of career positions
9. Create a new volunteer department
10. Create a countywide fire department
11. Implement a system of private fire service
12. Expand the territory of an existing department
13. Make purchase of fire protection service mandatory through property taxes

Policy alternatives three through five do not need be considered because they would require extensive participation from the state government, which is beyond the purview of Obion County alone. Homeowners insurance is not required by state law but rather by the mortgage holder or lender in order to protect the investment in a property. If a homeowner does not have a mortgage on their home, they are not required to obtain homeowners insurance.

Alternatives six through eight depend upon the size of the community, the values to be protected, and the number of fire calls to be answered. Larger cities require fully paid fire departments with permanent staff. Smaller communities, residential districts, and rural areas, however, often have fewer fire calls, and usually depend upon volunteer firefighters to completely staff their fire departments. Often times, these communities rely on a skeleton force of fully paid apparatus operators (Bond, 1942). Property taxes would have to be increased dramatically to fund the construction of a new fire station, the purchase of a new apparatus, equipment and supplies, and full-time salaries and benefits. On average, there are three apparatuses in each of the eight municipal fire departments in Obion County. Each apparatus costs about \$250,000 each. The cost to place three new apparatuses in this additional department alone would be at least \$750,000. Among each current department, there is an average of about 23 firefighters on staff who work rotating shifts (Town of Troy, 2008). Their salaries would need to be paid, as would the cost of required training and certifications. In addition to apparatus and personnel costs, the new department would need to be equipped with necessary items such as hoses, nozzles, tools, radios, Self-Controlled Breathing Apparatuses (SCBAs), and personal safety equipment, such as turnout gear. Given the size of Obion County and the population density, a new career or combination department would not be warranted. It must be noted that the current \$75 annual fee only supports a portion of the total cost.

A concern with the combination department would be whether the two groups would get along or if there be disagreements due to different interests at stake (Finley, 2002; Yacovino, 1999). There are often conflicting priorities between career and volunteer personnel (Cullinan,

2009). These conflicts can decrease teamwork and create inefficiency (Lyon, 2006). The departmental options discussed above will not work in Obion County due to funding. Even if a grant were secured to build the station, it would take more than that to sustain operations into the future. Now that six policy alternatives have been eliminated, the remaining seven are summarized in the following table with accompanying descriptions.

Table 2: Evaluation of Policy Alternatives

Policy Alternative	Political Feasibility	Financial Feasibility	Cost Effectiveness	Quality of Service
No change	No	Yes	No	No
Change the pricing model	Maybe	Yes	Yes	Yes
Create a new volunteer fire department	Maybe	Maybe	Yes	Yes
Create a countywide fire department	Maybe	Yes	Yes	Maybe
Implement a system of private fire service	Maybe	Maybe	Maybe	Maybe
Expand the territory of an existing department	Maybe	Yes	Yes	No
Make the purchase of fire suppression “mandatory” through property taxes	Maybe	Yes	Yes	Yes

No change

Keeping Obion County’s subscription service exactly the same does not solve the problem. Now that the subscription policy is being put to the test with two homes burning to the ground in the past year and a half, the media and the public are taking notice. The SFFD has received an onslaught of threats online and by telephone, and the chief was physically assaulted by one of the Cranick family members. The firefighters can endure the retaliation and public hostility to a certain point, but to be afraid to show up to work is unacceptable. If the firefighters fear for their lives with this policy in place, something needs to be done.

Firefighters are required to respond to a fire if a neighbor who has paid the subscription fee expresses concern that the fire will travel and put their property in danger. If the firefighters do not end up spraying a single drop of water, it still costs the department fuel, wear and tear on the apparatus, as well as time driving to the call. This is not an efficient use of fire department resources.

Change the Pricing Model

Another option would be for Obion County to keep its subscription system, but change its pricing model to something that looks more like its neighbor in Blount County, Tennessee. Blount also has a subscription service that charges an annual fee. However, their policy includes additional fees for non-subscribers. The damage from the Cranick and Bell fires would never occur in Blount because the firefighters serve non-subscribers and charge them afterwards. Homeowners can purchase a \$110 subscription annually to cover structure fires, car fires or other emergency situations firefighters would normally respond to throughout the year. For non-subscribers, the fire department charges \$2,200 for the first two hours firefighters are on scene, and \$1,100 for every additional hour (Daily Times, 2011). Fire Chief Doug McClanahan states that, “the department’s first priority is saving lives and property, whether a resident is a subscriber or not. The difference is that a subscriber, in the event of a fire, would be saving thousands of dollars. Having subscribers is a good thing, but to punish people to the point that

you don't do anything for them is wrong" (Daily Times, 2011). This pricing model has been extremely successful for Blount County and would be feasible for Obion. The two counties are similar in square mileage, population size, and rural conditions. There will be times when the full amount is not recovered, but that is the case with any type of collection. The residents who do not want to pay the annual nominal fee can choose to do so, but will pay a higher price if services are needed. Loyal subscribers will be rewarded by not having to pay the extra fees. If separate \$2,000 fees are a cumbersome idea for Obion, another way to change its pricing model is to keep the annual \$75 subscription fee, and add a clause to the policy that requires the homeowner to pay the full cost of extinguishing a fire if they do not to pay the annual fee. On the surface, this option may be attractive because the fire department could guarantee payment by collecting directly, or by billing the homeowner's insurance company. However, when homeowners do not have a mortgage, they are not required to have insurance and fire departments cannot bill non-existent insurance companies. The other option of directly collecting money presents a challenge in stretching valuable staff time and resources. Fire departments would have to add extra personnel to review costs, produce a bill and locate the homeowner. It is also possible that the homeowner will not be able to pay up front, and wasting time and resources chasing overdue bills. Ultimately, if the money is deemed uncollectible, the appropriate authority could place a lien on the house as is done with uncollected property taxes and zoning code fines (USFA, 2012).

Aside from the difficulties of collection, instituting this type of policy would take away any incentive of paying the \$75 annual fee. Why pay the fee if the fire department is guaranteed to put out the fire? In economics, this issue describes the free rider problem where someone consumes a resource without paying for it. The free riding issue describes why the SFFD stood by and watched two recent controversial fires. While many residents criticized firefighters for being cruel and heartless, the firefighters were instructed to do nothing by the city and county. The effective purpose was to send a message to non-subscription paying residents that free riding was unacceptable. Union City Fire Department Chief Kelly Edmison commented: "If they had tried to put it out, the chief would have been fired, the firefighters terminated, and there wouldn't have been anybody left to help fight fire for the majority of the rural residents in their area who do pay the annual fee" (Statter, 2010a). The disincentive to pay has the potential to take away the small amount of money that the fire departments are currently receiving from loyal subscribers.

Other funding alternatives range from small fees for special services to benefit assessments, which can pay for as much as 40 percent of the budget. There are also impact development fees in which private developers pay for all new fire stations and their associated apparatus and equipment costs. To motivate safe behaviors and achieve better compliance with codes, departments are using a variety of fees and citations for repeat inspections, false alarms, and code violations. Some fire departments are defining the basic services covered by taxes to include only a small house fire, and charge for "additional services" such as dealing with emergency medical service responses, hazardous materials incidents, extinguishing larger fires, standing by at events, pumping flooded basements, and providing other technical services. Some fire departments charge for fire suppression, knowing that household insurance policies often cover fees associated with fire protection (USFA, 2012).

Create a New Volunteer Service

A new volunteer fire department with an entirely unpaid staff would certainly reduce financial strain, but will also encounter issues with recruitment and retention (Cullinan, 2009). Most firefighters are passionate about what they do and have an intrinsic motivation to serve the public, but there is never a guarantee that the necessary number of volunteers will show on every call. After all, volunteer firefighters do not receive monetary compensation and are not contractually obligated to show up. Ultimately, they cannot be penalized or fired. While the County's \$75 fee is small, it should cover most of the training costs. The National Volunteer Fire Council estimates the cost of equipping and training a firefighter at \$27,095 (Sisson, 2010).

Other revenue options include fundraising and grants. Using the previous GIS map as a base, U.S. Census Bureau 2010 data and other data acquired from the Tennessee Spatial Data Server and Geo Community were utilized. A summary is provided in Table 3.

Table 3: Fire Department Population, Area & Population Densities

District	Fire Department	Population	Area (sq.mi.)	Pop. Density (pop./sq. mi.)
1	South Fulton FD	4,459	50.77	87.84
2	Union City FD	5,110	66.58	76.75
3	Rives FD & Kenton FD	4,245	145.08	29.26
4	None	4,891	12.66	386.33
5	Samburg FD & Hornbeak FD	4,342	186.19	23.32
6	Obion FD & Troy FD	4,507	82.05	54.93
7	None	4,253	12.18	349.17
	Total	31,807	555.51	

Note: Data adapted from the U.S. Census Bureau, the Tennessee Spatial Data Server and GeoCommunity.

The following geoprocessing techniques were utilized: “Buffering,” “Clipping,” a “Weighted Overlay” and “Cost Distance.” A constant 5.07-mile buffer was drawn around each of the existing fire departments to show how the average response distances covered the County. The “Weighted Overlay” and “Cost Distance” analysis tools were used because they answer questions related to attributes and the spatial relationships between existing populations and distances that did or did not have certain qualities to locate suitable sites (Ormsby et al., 2010). These tools provided an unexpected result: they determined that the location possessing the highest level of need for a new rural fire station is in the northeast portion of the County in District 4 as depicted by it being in the middle of the darkest shade of blue/green. See Figure 3.

The 386.33 people per square mile and distance meet the specified conditions in this area of Obion County where they overlap. District 4 has 4,891 people and an area of 12.66 square miles. Interestingly enough, this is one of the two districts that possess zero fire departments (refer back to Table 3); the other is District 7. By placing a new station in part of District 4, the County would be using its resources in the most efficient manner because it would be able to provide a higher quality of service by reducing the average response time of 11.14 minutes. At the same time, this new rural station would assist in improving Union City Fire Department and South Fulton Fire Departments’ operations by supplementing service. Placing a new station in this location has the potential to help better prevent fires in Obion County.

According to Sisson (2010), the Obion County volunteer departments feel the financial strain, and bake sales, fish fries and donation drives only go so far in meeting minimum operating expenses. One cost option involves a federal grant application to construct a new fire station. In 2009, President Barack Obama signed the American Recovery and Reinvestment Act (ARRA) Station Construction Grant (SCG). This act included an additional \$210 million in firefighter assistance grants for modifying, upgrading or constructing state and local fire stations, provided that five percent be allocated for program administration and no grant exceed \$15 million. ARRA SCG’s are administered once a year and there is no cost-share requirement. Eligible applicants are non-federal fire departments that provide fire protection services to local communities. DHS/FEMA received 6,025 SCG applications for \$9.9 billion in federal funds in 2009. As of June 2010, 112 SCG grants had been awarded, totaling \$200.8 million to fire departments within the United States (Kruger, 2010). Obion County could apply for such a grant to pay for the construction of a new volunteer fire station to service the rural unincorporated areas. If the grant was awarded, the county could incur zero up-front costs, but sustainability would be an issue. Over time, Obion County may not be able to fund the maintenance of this station and its equipment through subscription fees alone.

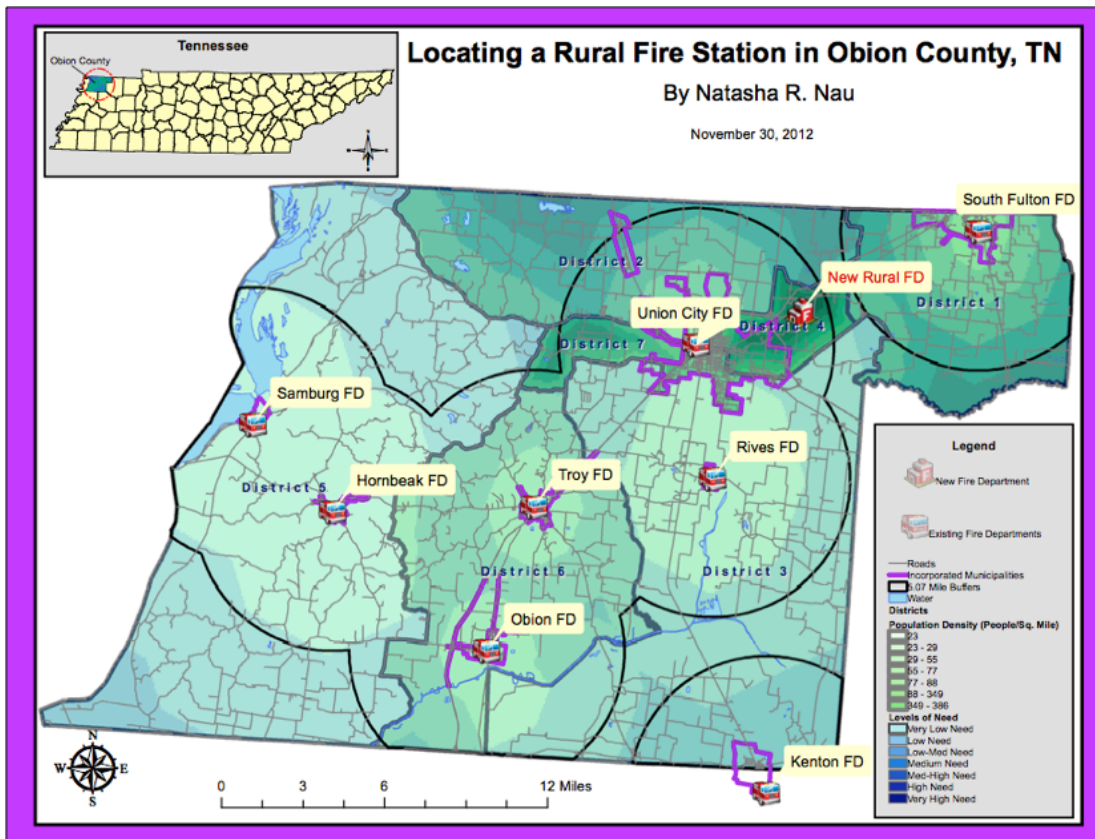


Figure 3: Locating a New Volunteer Fire Department

Create a Countywide Fire Department

Funding is a constant struggle in rural areas and fire chiefs are always attempting to find creative ways to solve this problem. In 1987, Richard Chestean created a comprehensive countywide plan that would give everyone in the county fire protection. The plan divided the county into fire districts and appointed a fire chief, but funding divided the leaders. The county commissioners at the time voted in full support of the fire district plan, but would not raise taxes to pay for a service offered for free by nearby cities. Chestean states, “they never paid because the firefighters came out anyway” (Murphy, 2010). Chestean’s plan was then stalled for 23 years and the debate on whether to tax or offer subscription service continued while houses burned to the ground.

The Town of Troy gave a presentation on adopting this same type of countywide policy in 2008, but nothing was done to follow up. The 2008 plan proposed using the resources of the current eight municipal departments at the onset, and constructing additional stations in the future as needed. This policy option requires departments to share resources in order to extend services to unincorporated areas. Moreover, the countywide plan has very few up-front costs and is an excellent example of doing more with less. The issue of sustainability, however, is a concern. If the optional subscription fees were kept in place, residents would receive guaranteed fire protection at a low cost, but political tensions may arise between a countywide department and municipal departments. By taking the steps to make the county fire department operational, Obion County could apply for grants such as the FEMA Assistance to Firefighters Grants (AFG) and Community Development Block Grants (CDBG), which could be a good source of funding (Town of Troy, 2008). While these types of grants can go to small, existing municipal

fire departments, it is more likely to be awarded to a start-up effort such as this that demonstrates great need.

Implement a System of Private Fire Service

Fire protection services in Obion County could be shifted to the private sector by providing it on a contractual basis. The use of private firefighters is longstanding practice in Arizona, where the Scottsdale-based Rural/Metro runs 37 fire stations. Rural/Metro is the second-largest fire department in the state. Established in the 1950s, the company employs 8,000 people in 24 states. Rural/Metro provides services to municipal, residential, commercial and industrial customers in about 400 communities. The company has also filled a niche by providing fire services in unincorporated areas that otherwise would not have been protected. Some service is provided to fire districts with taxing powers, but most is provided on a subscription basis to property owners. Rural/Metro Fire Chief Gary Morris states that "rates are typically below what it would cost for a fire district to offer the service." Subscription revenue is the primary means of funding. The other is a standard charge for service that is delivered to non-subscribers. "We don't say no; we just go," Morris said. "Dispatchers have no idea if a caller is a subscriber or not. We frequently go well outside service areas to assist on fire or medical emergencies." Morris said Rural/Metro prides itself on customizing service to communities as well as on its training (Stanek, 2007).

While private fire protection has been very successful in Arizona, instituting the practice in Obion County may be challenging. Municipal firefighters would lose jobs, and that would cause uproar from fire unions. Depending on the county's funding structure, private services may be more expensive or cheaper. The county would have to study this issue further. Last, Obion County does not regularly track and monitor their Level of Service (LOS). It would be difficult to predict how economically efficient private fire protection would be.

Expand the Territory of an Existing Service

Elected officials and local government leaders could expand the territory of an existing municipal department. Each of the eight departments cover a designated area that is demarcated by a preexisting boundary line. These areas could be widened to include unincorporated parts of the county. While expanding the boundaries would not entail the construction of a new station, it may affect the quality of services. For example, if a fire department's territory were to be expanded, firefighters would have travel longer distances to get to certain locations. Burning homes may be in jeopardy if firefighters cannot get to them quicker. One way to supplement an expansion is for departments to enter into an "automatic" or "mutual" aid agreement. This type of agreement is instituted for certain jurisdictions that take longer to reach. The department that is closer to that municipal boundary is dispatched to assist the other department (Rusboldt, 1998). This policy alternative facilitates coordination, and minimizes waste. Mutual aid agreements are set up in municipalities that have the resources to overlap services as a precaution.

Make Purchase of Fire Protection Service Mandatory through Property Taxes

Typically collected by local property taxes or through a "fire tax," mandatory fire protection is the most heavily utilized policy in the United States. Mandatory purchase of fire protection services would provide 100 percent coverage for all residents. Obion County's eight fire chiefs heavily support the tax and fee policy. As it was stated earlier, county commissioners voted 17 to 1 in October of 2010 to place a fire tax and fee referendum on the ballot in 2012. According to the Town of Troy (2008) report, property taxes would only need to be increased 0.13 of a cent on each household to generate the necessary funds. This would increase revenue by about \$546,000 for the county. The significant number of delinquent taxes, however, remain a concern. This issue may be addressed by placing a lien on a property until the taxes are paid (USFA 2012).

Mandatory payment through utility bills is another way for the county to collect revenue. In rural Alabama, fire departments partner with utility companies and include the fire fee within the monthly utility bill at a rate of about five dollars each month. Electricity, for example, is often

considered to be a necessity that is not “forgotten.” This policy option would take choice away from the residents to pay, or not pay, for fire protection. It would also reduce the stigma of a “separate fee.” By “hiding” the fee within a utility bill, some are concerned that a small percentage of people who would intentionally choose not to purchase electricity. Residents who cannot afford it may also be dissuaded from purchasing electricity.

Policy Recommendation

Of the seven policy alternatives evaluated, it is recommended that Obion County make the purchase of fire protection services mandatory through property taxes. Before the Cranick fire, Obion County fire chiefs submitted a proposal to implement a fire tax. Instead, the county went in the opposite direction and expanded the subscription service (Statter, 2011). For over four years, the eight fire chiefs have been trying to convince the county to implement a fire tax, similar to the system implemented in most U.S. counties (Statter, 2010a).

Transforming the current pay for spray policy into a mandatory fire tax protects rural residents. A large proportion of the population has expressed an unwillingness to pay the subscription fee. If the county wants to avoid further scrutiny and possible litigation, it should take the choice out of the residents’ hands. All property owners are required to pay taxes by law. Therefore, including a fire fee within county taxes would better ensure payment and partially support the cost to deliver fire service.

As discussed previously, the subscription fee revenues do not actually support the cost of delivery. If the county decided to do away with the pay for spray policy and include fire protection services within taxes, the fee amount would have to be determined. Would the cost to residents increase, decrease, or remain at \$75? For this policy option to be politically acceptable, the county would probably want to keep the cost at \$75, but the fee is already low in comparison to other Tennessee counties. Blount, for instance, utilizes subscription services and charges \$110. According to Union City Fire Chief Edmison, if it was a tax and 100 percent of residents were compliant, the tax could probably be reduced to \$55 or \$60. It is not often that a politician has the opportunity to pass a tax: 70 percent of the population favors it, and it saves residents \$15 or \$20 per year (Statter, 2011). “The chiefs are not looking at the subscription program as the ‘goal.’ [It is] merely a step in what we hope will eventually ‘fix the problem,’” said Edmison (Statter, 2011).

California, a state renowned for wildfires, recently instituted a fire tax in August 2012 that would cover up to \$150 and protect rural areas. Homeowners already pay local fire districts for fire protection. Soon California residents will receive a \$35 reduction, which will bring the fee to \$115 per habitable structure. State fire officials estimate that 95 percent qualify for the reduction (Reddy, 2012). This fee, however, is controversial and has faced constant opposition from its inception. In justifying the fee, state officials point to the increase in the number of homes in rural areas, which also increases the cost of fighting fires in those areas (Reddy 2012). According to the State of California website (2012), the fee will “fund a variety of important prevention services [such as] brush clearance around communities [and] along roadways and evacuation routes.” The state website claims that these preventative measures “improve forest health so it can better withstand wildfire.”

Clearly, Obion County would incur a loss from the small percentage of residents who avoid paying the tax. However, fire departments would not be overburdened with extra paperwork if the fee were included within taxes either because enforcement would be the responsibility of the county government. With the exception of South Fulton, which collects its own fee, the county collects subscription fees for all other departments (Statter, 2011).

After speaking with Chief David Wilds at SFFD, it was discovered that county commissioners attempted to make fire protection mandatory by including it within taxes many years ago (personal communication, November 20, 2012). Farmers were vehemently opposed to the plan, and threatened to vote the commissioners out of office if the proposal went through. The commissioners wanted to get re-elected so they conceded to the farmer’s demands. Wilds

noted that the ordeal was humorous because farm properties are tax exempt, and would be unaffected by a mandatory fire tax in the first place (personal communication, November 20, 2012).

Fire can happen at any time, in any place, and to anyone. The next time a house catches fire in Obion County there could be more serious consequences than just property damage alone. In communities with firefighting subscription fees, fewer than 70 percent pay them (Daily Times, 2011). Obion County needs to make a change, and at this point something is better than nothing at all. The county has long ignored the local fire chiefs and their pleas to institute some type of fire tax (Statter, 2012).

Obion County recently made a drastic change to its pay for spray policy in April 2012, using alternative number three from this paper: it changed the pricing model. The new policy still provides for a subscription service, but those homeowners who are unwilling to pay the annual \$75 fee will be able to receive fire protection services. The firefighters now respond to all reported fires within the relevant fire department's jurisdiction, but bills non-subscribers \$3500 for the response (Statter, 2012). It is not a perfect system, but it is a step in the right direction. Firefighters must no longer watch a home burn because the owner did not pay the subscription fee.

County firefighters remain concerned over two related information-flow issues. First, it is almost impossible to know whether someone is trapped in a burning building, especially if a fire company does not respond to the scene. Second, the database of subscribers is imperfect. Town of Obion Fire Chief Jamie Evans said he is required to check the computer database before responding to a county fire. While he is not responsible for putting names in the database, Evans fears that under the new county contract, he would be responsible if someone is left out: "I can't edit it [...] I can't do anything but access and look at it, so I really don't think it should be my responsibility to take the blame" (Statter, 2012). According to the local television station, WPSD-TV, County officials told the fire chiefs that if there is a time that more than 70 percent of county residents became fire protection subscribers, a special election would be called to determine if there should be a fire tax. Although Chief Evans said it has reached that point, there is no word on a special election thus far (Statter 2012).

Two additional fires occurred within two weeks of one another around the time that the County changed its pricing model, and two homes burned to the ground. Each fire occurred prior to the implementation of the new policy. The first, on April 12, was located off Cemetery Road, due north of the Town of Obion. The homeowner did not pay the fee. Firefighters responded because the resident, a mother and her three children, were trapped inside (Hibbs, 2012). The second fire, on April 24, occurred on Highway 22, ten miles west of Union City. This residence, however, was "covered under the rural fire subscription program" (Bowden, 2012).

According to SFFD Fire Chief David Wilds, there is also an additional charge for subscribers with the policy change. Subscribers who pay the \$75 fee also have to pay \$750 for response. In Wilds' opinion, this was a smart move by the county, and he is pleased with the system thus far (personal communication, November 20, 2012). The selection of this policy alternative seems reasonable because it parallels other fees that are customarily assessed to property owners, such as school taxes, water and sewer fees and trash collection fees. When people do not pay these bills, the county or city assesses a tax lien on the property as a sanction until the fee is paid. It is probable that the two recent fires will serve as "focusing events" (Birkland, 1998) due to the outrage they have provoked at the national level. These focusing events not only change the dominant issues on the agenda in policy sense, but also lead to interest group mobilization in a political sense.

Conclusion

Stimulated by local budget pressures, fire and emergency medical service departments in the United States use a wide array of fundraising approaches beyond traditional methods. Subscription programs for fire protection have created controversy when departments refuse to extinguish fires in non-subscribing households. Communities that are considering subscription programs need to inform key constituencies about the planned rules to reduce misconceptions (USFA, 2012). Each agency providing fire-related services must consider the range of policy options based on local and state budgetary constraints. Funding influences the amount of resources available, and within the scope of prevention activities, influences life and death emergency responses (USFA, 2012).

Funding for protective services raises fundamental questions about equity and governance in general. Is it too dangerous to give homeowners the freedom to choose? Obion County decided to change the pricing model in mid-April 2012. This choice reflected a more libertarian sentiment than a paternal one. Libertarian-minded commissioners allow residents to choose subscription fire services. Paternalism, alternatively, emphasizes the control of public services, whenever it is beneficial to the community. This is the stance that should be adopted when making policy decisions regarding fire protection, and other emergency services for that matter. Many Americans do not feel the need to purchase health insurance when hospitals are required to treat patients. Subscription-based fire protection is similar. In Obion County, residents are under the misinterpretation that firefighters will come regardless of their subscription status. Unfortunately, as it was seen with the two fires in the County back in 2010, this is not the case. Despite the fires over the past two years, residents still choose to opt out of fire protection, and remain inclined to take the risk.

The county promised to call a special election if 70 percent of residents bought fire protection (Hibbs, 2012). Property taxes would not be raised significantly. In 2008, it was estimated that taxes would increase by 0.13 of cent on each household (Town of Troy, 2008) to generate the \$546,000 of necessary funding. This comes out to a total of about \$42 per household, or \$546,000/13,077 of occupied households, which is actually lower than current subscription fees. It is highly recommended that the County include the fire protection fee within local property taxes. As of 2012, 70.1 percent of county residents paid for the subscription fee. Fire chiefs are waiting to see if this issue makes it on the next ballot (Hibbs, 2012). The local fire chiefs have pushed for this change for many years. Commissioners should look past the political controversy and seriously consider including the costs of fire protection within property taxes for the safety of Obion County residents.

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