

**MAGNIFYING DISASTER:
THE CAUSES AND CONSEQUENCES OF
HOME UNDERINSURANCE**

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**A DISSERTATION
PRESENTED TO THE FACULTY
OF PRINCETON UNIVERSITY
IN CANDIDACY FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY**

**RECOMMENDED FOR ACCEPTANCE
BY THE DEPARTMENT OF
SOCIOLOGY**

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April 2013

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ABSTRACT

Existing surveys demonstrate that in the United States, most homeowners believe that their home insurance coverage will cover the complete costs to rebuild their home in the event of a total loss. Yet, most dwellings are insured for an amount that is less than what would be required to rebuild – a condition called “underinsurance.”

By conducting historical research on the United States home insurance market, I show that insurers have recognized underinsurance as a problem afflicting the home insurance market in every decade since the Depression. Insurers have repeatedly attempted, and failed, to resolve inadequate insurance-to-value – through salesmanship, innovations in valuation methodologies, and automation. This result complicates theories of inadequate insurance, drawn from insurance economics, that explain inadequate insurance as primarily a problem of demand. A longstanding supply-side problem of accurate property valuation has contributed substantially to widespread, persistent underinsurance.

Using fieldwork conducted after the 2003 and 2007 San Diego wildfires, I show how pre-loss policyholder experiences supported their expectations that their home insurance would be sufficient: analogical reasoning from small losses to large losses; interactions with insurance agents; and legal consciousness of the insurance contract.

This case demonstrates how the presence of information asymmetry in a market can accompany “false certainty” of transaction outcomes – not just perceived uncertainty of transaction outcomes – among low-information parties to transaction. Market features that are often credited with reducing uncertainty need not always equip market actors with better knowledge; these conditions can elide potentially variable transaction outcomes, consequently contributing to widespread market misconceptions.

In contrast with most existing disaster recovery studies, I find that even households with reputable insurers struggle with insurance after disaster. Policyholder efforts to overcome inadequate insurance did not only consist of taking out loans or using savings; rather, individuals actively attempted to minimize the size of their home insurance gaps through actions intended to increase insurance payouts or decrease rebuilding costs. For insured households, gap-minimizing strategies – which I identify as negotiating, barn raising, and downsizing – constituted much of the disaster recovery process.

ACKNOWLEDGMENTS

I owe a debt of gratitude to my interview subjects: homeowners who invited me into their homes to recount a difficult period of their lives, insurance agents who took hours out of their day to explain the nuances of selling home insurance, insurance adjusters who gave me invaluable perspective on the insurance claims process, and individuals involved in disaster recovery. While you may or may not agree with my analysis, your cooperation was essential to this project – and I greatly appreciate your willingness to share your stories.

Numerous individuals who worked or volunteered after the 2007 San Diego Wildfires, despite having a host of competing obligations, made time to help me: George Kehrer, Amy Bach, Valerie Brown, Janis Rasmussen, Karen Reimus, Linda Chase, Robin Clegg, Theresa Manley, Bonnie Fry, David Kassel, Deena Raver, and Chris Tuthill are among them. I reserve special thanks for Lila Hayes. From the moment I met Lila, she has gone out of her way to help me navigate the San Diego disaster recovery community, find information, and express enthusiasm about my work.

The research presented in this dissertation has benefited greatly from assistance provided over the years by subject librarians specializing in insurance, business, and law. Librarians Ismael Rivera-Serra and Yonathan Dessalegn at the Shelby Cullom

Davis Insurance Library procured countless historical gems that helped me piece together how the insurance industry has evolved over the past century. At Princeton, David Hollander and Bobray Bordelon answered my law and my economics reference questions with efficiency and thoroughness. At Stanford, James Jacobs guided me in my search for government documents.

A number of organizations and individuals made it possible for me to draw a random sample of 2003 wildfire survivors. The San Diego County Department of Planning and Land Use, City of San Diego Development Services, and City of Poway Building Services made the 2003 and 2007 lists of burned properties accessible to me. Connie Gipson and Laura Engel at First American Title Company provided publicly available information for the owners of some of those properties.

The Stanford Department of Sociology hosted me for a year through the Inter-University Exchange Scholar Program. Stanford interlibrary loan service was indispensable for helping me access uncommonly held insurance materials.

The Law and Public Affairs Program (LAPA) provided a venue for me to seek feedback on my research and provided a community of scholars across Princeton University who are bound together with a shared broad interest in how law operates in social life. At LAPA, Jen Bolton helped make it possible for me to stay in touch while living away from Princeton.

After amassing mounds of field notes, I needed the mental and physical space to sort through the information I had gathered. Heather and Sidney Lanier leased me an amazing studio in the mountains for a few months, at a price I could afford. Their guest

house was just the touch of solitude and inspiration I needed to move forward. Thanks to Channell and Jan Wasson for introducing me to the Lanier family. After I returned from the mountains, the Schmidt Family Foundation leased me an excellent private office space in Palo Alto at a reasonable rate. Thanks to Amy Rao for organizing that opportunity on my behalf.

In the Princeton Department of Sociology, Paul DiMaggio has been a reliable source of helpful criticism. I hope this version of my work benefits from his advice.

Viviana Zelizer has introduced me to the kinds of questions about economic life that I find most compelling. Her books set the standard for the kind of book I would eventually like to write.

Kim Scheppele has been an invaluable mentor. I am deeply grateful for the incisive suggestions she has given along the way that have improved my work tremendously, her knack for conveying the most inspirational, entertaining, and instructive stories about academic life, and her actions to help me obtain (and keep) the resources I need to work. Kim permitted me take ownership of my project, on my own schedule. For her efforts to nurture and protect my scholarly voice and work style, I am exceptionally grateful.

I count myself fortunate to have a fine set of longtime friends whose support I have cherished: Josh Birch, Winnie Cai, Sadie Mizisin-Cullumber, Frank Escobar, Kellam Conover, Sean Flynn, Sarah Mayberry, and Dave Paul. Thank you for letting me disappear for good long periods in order to work, which I am prone to do, without letting it affect the depth of our friendship. I especially thank Kellam Conover, who read

drafts, gave pep talks, and served as a sounding board as I refined my theoretical approach.

My brother-in-law Ali has sacrificed his comfort in his one-bedroom Manhattan apartment to enable me to return to the Davis Insurance Library and to Princeton as often as necessary during the last two years. It is through generous gestures like this that I have realized just how deep brotherhood can run.

My family has been exceptionally supportive of my endeavors. My father has delivered motivational speeches that were intended to propel my research forward with utmost efficiency (i.e. “just get ‘er done!”). My mother has worn all hats. She has transcribed interviews, located online sources, read drafts to see if they are jargon-free enough to pass the “mom test,” helped me organize my home office when the stacks of paper covered all the flat surfaces, and handled with exceptional grace and tact the inquiries made by extended family about when I will be “done with school.” My grandmother has entered bibliographic information into databases. My brother has cleaned audio and video recordings so that they were easier to hear and transcribe.

Finally, I thank my husband, Hamed, for the kind of deep and loving connection I never thought possible.

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PROLOGUE

Nearly a mile away, a ridge was ablaze. Karen and Alan Nephew had witnessed at least three fires in the last 27 years, and none had caused damage to nearby homes. What reason had they to believe that this fire, even further away than its predecessors, could put them in harm's way? Before they could contemplate the comparative risks, burning embers the size of softballs carried by roaring winds fell upon their acre. Karen and Alan found themselves, unexpectedly, in the middle of a firestorm at three on a Sunday morning. Wearing only their night clothes, they grabbed a few photos from the walls, collected the dog, and piled into vehicles to make a harried escape.

For days after their October 26, 2003 evacuation, they existed in a state of chaos. Along with their son, they fled to the home of a family member, which became threatened by the fires only a day later. They moved to a temporary shelter, since highways and roads leading elsewhere were closed. The growing conflagration threatened the shelter, so they had to evacuate again. And again. During those days when East County neighborhoods were choking with smoke, it seemed that all of San Diego County was ablaze.

Alan and Karen returned home four days later. Everything on the property, including the house, was reduced to a set of twisted, blackened, unidentifiable objects strewn

across a moonscape. At least twelve other houses on the street were decimated. The neighborhood was denuded of foliage: homes that had survived were exposed in full color against a backdrop of gray ash.

Alan and Karen Nephew are my parents. At the time of the fire, I was enrolled in my first year of the sociology graduate program at Princeton University. Upon learning that my family home had been destroyed, I flew home to support my family, sort through rubble, and compile my list of belongings that were lost in the fire. I returned to Princeton to continue in my classes, even though I found it difficult to sleep and study; the concern I felt for my family's wellbeing was overwhelming. This is to say nothing of the emotional experience of losing almost everything I owned, including photos and journals. I felt unmoored, my anchor gone and my personal history erased.

Back home, my parents faced a cyclone of recovery tasks. Handling the insurance claim was at the top of their list. They met with adjusters, talked with insurance company representatives on the phone, and prepared paperwork and receipts. They were prompted to recall in detail the contents of every cabinet and every drawer, the quality of tile and thickness of beams – all in the presence of a dispassionate adjuster who waited patiently through crying spells. It was arduous, time intensive, and emotionally draining.

Days in recovery turned into months. My parents had to find a temporary living arrangement; acquire the supplies needed for daily living; replace personal documents; select a contractor; draw up rebuilding plans that complied with Department of Planning and Land Use building codes; replace belongings; select furniture, fixtures, and

finishings; and manage the contractor and subcontractors. They took on all of these activities – including the insurance claim – in the midst of their other life projects. And they did so while living in a 21-foot travel trailer that they moved to the property as a temporary replacement for their home.

My parents were deeply affected by the loss. Dad raced to rebuild as fast as possible in order to beat the masses to the building permit counter, sublimating his grief with a nightly drink. Mom cried often, as people – out of natural curiosity – prodded her for the flame-by-flame account that brought her grief, lurking just below the surface, back to the fore for all to see.

All told, my parents were fortunate: they moved into their new house on the property about nine months after the fire. They contend that they were among the first ten homeowners who had sustained a total home loss to rebuild in the County of San Diego – no small feat considering that over 2000 homes burned. Collectively, we believed that others on the street would soon follow. We were wrong. As of October 2007, four years later, some lots had post-fire debris still littering the landscape. Other lots had been cleared, but with no sign of new construction. On still other lots, residents continued to live in travel trailers. The question that came to mind during each visit home was, "why?"

My back-of-the-napkin investigation began around the kitchen table with a couple of neighbors who are well-known to our family. I asked them about their fire losses, and what their recovery was like. One neighbor had not been paid enough by the insurance company to rebuild. A second neighbor was finding that insurance compensation under

her policy would not cover the code upgrades required by the County building department. Their stories raised serious questions. How could people who had homeowners insurance struggle for so long to restore their property and their lives, and face such inadequate compensation?

Little did I know, then, that I would soon have the opportunity to find out. The fire that consumed our house, the Cedar fire – part of the San Diego wildfires of 2003 – seemed like a once-in-a-lifetime disaster for the region. It had been the first major fire since the 1991 Oakland Hills fire burned a large number of homes 12 years before. Yet, almost exactly 4 years later, history repeated itself. In October 2007, another set of fires hit San Diego County, affecting many of the same communities and neighborhoods.

I realized that I had landed upon a dissertation topic that was both personally meaningful and socially significant. I found myself in an excellent position to formally investigate the process and outcomes of the post-disaster insurance claim process. I could use in-depth interviews with 2003 fire survivors to offer a retrospective view on recovery, while I could use observations of community recovery meetings after the 2007 fires to elucidate how the recovery process works in real time.

In January 2008 I began my dissertation on the role of insurance in disaster recovery: specifically, I focused my fieldwork on insurance claims following the 2003 and 2007 wildfires in San Diego County, California. I interviewed fire survivors, insurance personnel, community recovery workers, insurance consumer advocates, contractors, and expert witnesses. I was a participant-observer in the 2007 long-term community disaster recovery effort from February 2008 to January 2009, attending

meetings of 2007 fire survivors and disaster recovery workers. My participation felt like a whirlwind: I traversed the county multiple times in the same day to attend meetings and interviews.

Doing fieldwork on the 2003 and 2007 wildfires was difficult for me: it was no easy task to recall my own disaster experience in every interview I conducted and in every meeting of fire survivors. I realize now that it was precisely for this reason – however painful – that I was well-equipped for the task. My status as a member of a fire-affected family was helpful for obtaining interviews, knowing the right questions to ask, and eliciting trust. The interviews often turned into a conversation of mutual sharing, rather than one-way probing by an outsider. More than one survivor I interviewed indicated that our meeting was healing. I also found it therapeutic to listen and share memories of those times.

I know that my personal experience as a member of a fire-affected family leaves me open to criticism that my analysis may not provide a fair picture of the insurance industry. Indeed, homeowners who are angry about their insurance experiences might allege that the reason for their problems is that companies or adjusters lack moral footing. Were I to take this point of view before conducting a sound investigation, I would be violating best social science practices. By the same token, had I worked as an insurance industry employee before doing this project – instead of being a member of a fire-affected family – I could be subject to another kind of bias: perhaps a belief that insurance problems are caused because people are greedy and are only too eager to embellish their claims if they think they can get away with it. Obviously, it would be a

mistake to adopt either one of these explanatory frameworks as the foundation for sociological analysis. They are part of the story, inasmuch as they are part of the institutional context within which policyholders and companies transact. Neither of these views needs to stand for the analysis itself. So, to critics I say: I am attuned to the potential for bias given my position as fire survivor. I have attempted to describe the dynamics, process, and outcomes of insurance transactions as accurately as possible. I leave my fulfillment of that objective for the reader to judge.

As C. Wright Mills wrote in *The Sociological Imagination*, a sociologist who values the ideals of freedom and reason should aim not only to write for other sociologists, but also for three other audiences. A sociologist should write for decision-makers who are unaware of the consequences of their actions; for decision-makers who understand the consequences of their decisions; and for individuals who are regularly without power and who – lacking knowledge of broader social realities – interpret their personal experiences as purely personal troubles rather than as public issues.¹ In keeping with his spirit, I hope that policymakers, politicians, and community leaders will use material discussed here to improve services for disaster survivors; that insurance industry personnel will channel any insights contained here into developing company practices that increase value and fairness for consumers; and finally, that homeowners will find this material to be a useful compass for the insurance transaction, especially when they feel all alone in their troubles.

1 Charles Wright Mills, *The Sociological Imagination* (Oxford University Press, 1959).

CHAPTER 1: HOME INSURANCE REVISITED

Disasters like fires, floods, hurricanes, tornadoes, earthquakes, threaten homes and communities with utter destruction in every country of the world.¹ In the United States, severe property damage due to disaster is an infrequent occurrence for individual homeowners.² In a survey conducted with 13,000 Americans that asked whether the household had experienced property damage, injuries, or death due to a fire, flood, hurricane, tornado or earthquake between 1970-1980 (11 years), 14 percent reported that they did.³

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- 1 Domestically, recent disasters that have caused extensive property damage include Hurricane Sandy (2012), the Midwest Floods (2008); Hurricanes Katrina and Rita (2005); 9/11 (2001); Fort Collins Flood (1997); Northridge Earthquake (1994); Hurricane Andrew (1992); and the Oakland Hills Fire (1991). Internationally, there was the Port-au-Prince, Haiti Earthquake (2010); Sichuan, China Earthquake (2008); the Indian Ocean Earthquake and Tsunami (2004); and the Bam, Iran Earthquake (2003). Of course, some disasters do not involve much property damage at all, such as the heat waves in Chicago (1995) and Europe (2003).
 - 2 The conditional statement, “in the United States,” is necessary here because scholars whose research is international in focus have pointed out that in many places, economic and social conditions are so bad that families in these areas regularly face disasters which threaten their wealth, emotional health, and survival. For example, earthquakes of low magnitude can be much more devastating to some areas than to others as the result of building quality (i.e. damage caused by the 2010 earthquake in Haiti versus the 1989 Loma Prieta earthquake). On the other hand, with higher quality construction comes bigger restoration and rebuilding expenses; the absolute monetary cost of a disaster is likely to be much greater in more developed areas.
 - 3 Peter H. Rossi et al., *Victims of the Environment: Loss from Natural Hazards in the*

Most experiences individuals have with disaster are relatively minor, compared with those who are among the misfortunate few whose losses are total losses.⁴ For these unlucky individuals and households, the consequences of disaster can be significant. Disasters can not only kill and maim, unexpectedly ripping people from the middle of life, but serious property damage can cause total household upheaval. Disasters can force a move, create burdensome tasks that interfere with other life projects, destroy sentimental objects that undergird identity, and cause terrible financial hardship. Recovery becomes an all-encompassing and unexpected life experience that jeopardizes financial and psychological health, puts a strain on household resources, and interferes with the ability of household members to carry out their normal routines of daily living. Disasters can cause increased household debt, depressed feelings among household members, and dependence on assistance from friends, neighbors, and charities.⁵

How do people begin to recover from property losses caused by disaster? Most U.S. homeowners turn to their insurance companies, making claims on insurance policies

United States, 1970-1980, 1st ed. (Springer, 1983). To put this in perspective, the study authors investigated the likelihood of other life events and found that people were more likely to be victimized by crime or to be unemployed for at least six months than they were to be victims of disaster during the same period.

- 4 “Replacement Cost Insurance: Actual Cash Value Vs. Actual Cost,” *FC&S: Personal Lines (Dwellings)*, October 2002: M33. According to this article, 4 percent of all losses are total losses. A different statistic was mentioned in a 2004 article appearing in the *New York Times*, which reported that “[O]f the millions of insurance claims every year, fewer than 2 percent are for the total loss of a house.” The source of this statistic is not reported. Joseph B. Treaster, “Homeowners Come up Short on Insurance,” *The New York Times*, August 31, 2004.
- 5 Rossi et al., *Victims of the Environment*.

taken out in better times.⁶ One industry organization estimates that 95 percent of homeowners and condominium owners have a home insurance policy in place.⁷ Approximately 6 percent of those insured homeowners will make a claim against their insurance companies for home damage – of any severity – in any given year.⁸

Insurance compensation has been recognized by disaster researchers as an essential resource families use to rebuild and restore their homes, their personal property, and their living conditions after disaster.⁹ Though, it has been widely acknowledged among disaster researchers that the home insurance safety net does not serve all individuals equally well.

Low income individuals, racial/ethnic minorities, and individuals living in high-risk areas find insurance difficult to access.¹⁰ Racial and ethnic minorities are less likely to

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- 6 Walter Gillis Peacock and Chris Girard, “Ethnic and Racial Inequalities in Hurricane Damage and Insurance Settlements,” in *Hurricane Andrew: Ethnicity, Gender, and the Sociology of Disasters*, ed. by Walter Gillis Peacock, Betty Hearn Morrow, and Hugh Gladwin (Routledge, 1997).
 - 7 Of those, about 1 in 5 has purchased additional flood coverage, and about 1 in 10 has purchased earthquake coverage. Insurance Research Council (IRC), news release, June 3, 2003, <http://www.ircweb.org/news/20030603.htm>.
 - 8 Jeremy Bowler and John Tenerovich, 2009 Home Claims Satisfaction Study (JD Power and Associates, 2009).
 - 9 Peacock and Girard, “Ethnic and Racial Inequalities in Hurricane Damage and Insurance Settlements”; Walter Gillis Peacock, Nicole Dash, and Yang Zhang, “Sheltering and Housing Recovery Following Disaster,” in *Handbook of disaster research*, ed. by Havidán Rodríguez, E. L. Quarantelli, and Russell Rowe Dynes (New York: Springer, 2006).
 - 10 Robert C. Bolin, *Long-term Family Recovery from Disaster* (Institute of Behavioral Science, University of Colorado, 1982); Robert C. Bolin and Patricia A. Bolton, “Race, religion, and ethnicity in disaster recovery,” *Program on Environment and Behavior*, no. 42 (1986), <http://bases.bireme.br/cgi-bin/wxislind.exe/iah/online/?IsisScript=iah/iah.xis&src=google&base=DESASTRES&lang=p&nextAction=lnk&exprSearch=10632&indexSearch=ID>; Peacock and Girard, “Ethnic and Racial

have insurance,¹¹ and when they do have insurance, they are more likely to have insurance through disreputable insurers due to redlining.¹² Individuals living in high risk areas can find it difficult to secure affordable, comprehensive coverage: insurers started reducing or eliminating their coverage offerings by peril and by region in high risk areas, in markets they formerly served, after the mid-1990s disasters.¹³ In terms of the outcomes of claims, the amount of compensation individuals receive from insurance payouts after loss may vary based on demographic characteristics. Poor and minority households have tended to report that insurance payments are not adequate to meet repair and reconstruction needs.¹⁴

Some households are ill-served by insurance after loss because they lack optional insurance coverages. Many of the people living in the most heavily flooded areas affected by Hurricane Katrina had no flood insurance,¹⁵ and neither did many residents

Inequalities in Hurricane Damage and Insurance Settlements”; Lisa K. Bates, “Post-Katrina Housing: Problems, Policies, and Prospects for African-Americans in New Orleans,” *The Black Scholar* 36, no. 4 (2006): 13–31.

- 11 Tom Baker and Karen McElrath, “Whose Safety Net? Home Insurance and Inequality,” *Law & Social Inquiry* 21, no. 2 (1996): 229–264; Hal C. Cochrane, *Natural Hazards and Their Distributive Effects* (Institute of Behavioral Science, University of Colorado, 1975); Peacock, Dash, and Zhang, “Sheltering and Housing Recovery Following Disaster.”
- 12 Peacock and Girard, “Ethnic and Racial Inequalities in Hurricane Damage and Insurance Settlements.”
- 13 Mary C. Comerio, *Disaster Hits Home: New Policy for Urban Housing Recovery* (University of California Press, 1998).
- 14 Bolin, *Long-term Family Recovery from Disaster*; Bolin and Bolton, “Race, religion, and ethnicity in disaster recovery”; Peacock, Dash, and Zhang, “Sheltering and Housing Recovery Following Disaster.”
- 15 Frank Koughan, “Housing and Insurance,” in *City Adrift: New Orleans Before and After Katrina*, ed. by Jenni Bergal (LSU Press, 2007).

affected by the Grand Forks flood.¹⁶ At the time of the 1989 Loma Prieta earthquake in California, a minority of California residents had earthquake insurance – despite living in an earthquake prone area.¹⁷

Other households can find after disaster that their coverage is not comprehensive enough to cover their disaster losses. The anti-concurrent causation clause, which affected thousands of Hurricane Katrina insurance claims, is a recent example of coverage holes for existing policyholders. In a nutshell, the clause holds that when damage caused by a covered peril is accompanied by a non-covered peril, the claim can be denied.¹⁸ Government-managed and government-subsidized insurance programs can charge high premiums (i.e. earthquake coverage in California) for coverage that can be restricted to only a bare minimum level of compensation (i.e. state FAIR plans).

Coverage unavailability, lack of affordable coverage, low penetration of optional insurance coverages in the marketplace, and policy restrictions that limit comprehensiveness of coverage have all been emphasized as major limitations on the ability of some households to recover via insurance after disaster loss. To cope with the gap between insurance compensation provided for a loss and the repair or replacement costs for that loss, insured individuals have been thought by disaster researchers to

16 Alice Fothergill, *Heads Above Water: Gender, Class, and Family in the Grand Forks Flood* (SUNY Press, 2004).

17 Comerio, *Disaster Hits Home*; Risa Palm and Michael E. Hodgson, *After a California Earthquake: Attitude and Behavior Change* (University of Chicago Press, 1992).

18 James W. Macdonald, Lloyd Dixon, and Laura Zakaras, *Residential Insurance on the U.S. Gulf Coast in the Aftermath of Hurricane Katrina* (RAND, 2010), http://www.rand.org/pubs/occasional_papers/OP284.html.

finance the difference. Since insured individuals tend to be ineligible for much institution-based disaster aid, housing recovery for insured disaster-affected households – besides insurance – is primarily financed through savings and borrowing.¹⁹ Individuals often rely on Small Business Administration (SBA) loans²⁰ and low interest loans²¹ to replace their property and reconstruct their homes in the absence of adequate insurance – a path that can lead to long term indebtedness.²² Individuals also use savings or sell assets to finance recovery.²³

What about the role of insurance in the household disaster recovery of individuals who have private home insurance coverage with reputable companies – and who have unambiguous coverage for the loss causing peril? Previous research seems to suggest that the system of private insurance has worked well for these households. Following Hurricane Andrew, the vast majority of insured homeowners reported receiving sufficient settlements and reported being satisfied on the whole.²⁴ In particular, among individuals who had insurance through a company that constituted the top-three – Allstate, State Farm, or Prudential – over 90 percent of all homeowners and 85 percent

19 Comerio, *Disaster Hits Home*.

20 *Ibid.*

21 Peacock, Dash, and Zhang, “Sheltering and Housing Recovery Following Disaster.”

22 Robert C Bolin, *Household and Community Recovery after Earthquakes* (Boulder, CO: Institute of Behavioral Science, University of Colorado, 1994).

23 Michael K. Lindell and Carla S. Prater, “Assessing Community Impacts of Natural Disasters,” *Natural Hazards Review* 4, no. 4 (2003): 176–185.

24 Peacock and Girard, “Ethnic and Racial Inequalities in Hurricane Damage and Insurance Settlements”; Peacock, Dash, and Zhang, “Sheltering and Housing Recovery Following Disaster.”

of Black homeowners said they had received enough money to cover repair costs.²⁵

Surveys of home insurance consumers would seem to support the conclusion that home insurance functions well for insurance policyholders with mainstream carriers. Consider a poll conducted by Harris Interactive on behalf of the Insurance Research Council: of 1,002 respondents, 89 percent reported being either very satisfied (56 percent) or fairly satisfied (33 percent) with their homeowners insurance company.²⁶ A survey conducted by Consumer Reports National Research Center reports a similar proportion of satisfied consumers: of 10,700 Consumer Reports readers who participated in the survey, 73 percent are highly satisfied with their current carrier.²⁷

Indeed, households with insurance (as well as stable employment, credit, and assets) are much less vulnerable to poor recovery outcomes than their poorer, unemployed, uninsured counterparts.²⁸ Insurance is an important resource, like other resources, that when absent in the aftermath of disaster, can cause households to struggle, take on debt,

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- 25 Peacock and Girard, "Ethnic and Racial Inequalities in Hurricane Damage and Insurance Settlements." An additional study found that Hispanic ethnicity households outside the primary area of Hurricane Andrew destruction received later claim payments than non-Hispanic whites, but similar patterns were not observed for Blacks and single female headed households: Baker and McElrath, "Whose Safety Net?"
- 26 Insurance Research Council, "Consumers Satisfied with Insurers," news release, August 20, 2009, http://www.insurance-research.org/sites/default/files/downloads/PAM_NR_8202009.pdf.
- 27 "Insuring Your Home: How to Find the Best Coverage for Whatever Comes Your Way," Consumer Reports Magazine, September 2009.
- 28 Robert C. Bolin and Lois Stanford, *The Northridge Earthquake: Vulnerability and Disaster* (Psychology Press, 1998); Benjamin Wisner, *At Risk: Natural Hazards, People's Vulnerability and Disasters* (Psychology Press, 2004); National Research Council of the National Academies, *Facing Hazards and Disasters: Understanding Human Dimensions* (National Academies Press, 2006).

and have more difficulty re-establishing a permanent home than they might otherwise. Yet, while it is true that insurance provides recovery advantages to households over those households without it, there are a number of reasons to believe that scholarly conceptions of the role of home insurance in household disaster recovery need to be more closely examined.

INSTITUTIONAL PRODUCTION OF DISASTER

Sociologists have long established that organizations and institutions can contribute to the occurrence and social consequences of disasters.²⁹ Through the complexity of organizational operations,³⁰ the constraints organizational cultures impose on decision makers,³¹ and institutionalized practices within organizations that may deviate from formally stated goals or procedures,³² organizations can generate disasters for individuals and communities. Much of this research has focused on technological disasters: how technologies go awry due to the operation of organizational routines.³³

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- 29 Diane Vaughan, "The Dark Side of Organizations: Mistake, Misconduct, and Disaster," *Annual Review of Sociology* 25, (1999): 271–305; Eric Klinenberg, *Heat Wave: A Social Autopsy of Disaster in Chicago* (University of Chicago Press, 2003); Charles Perrow, "A Society of Organizations," *Theory and Society* 20, no. 6 (1991): 725–762; Lee Clarke, *Acceptable Risk?: Making Decisions in a Toxic Environment* (University of California Press, 1991).
- 30 Charles Perrow, *Normal Accidents: Living with High Risk Technologies* (Basic Books, 1984).
- 31 Thomas D. Beamish, *Silent Spill: The Organization of an Industrial Crisis* (MIT Press, 2002).
- 32 Diane Vaughan, *The Challenger Launch Decision: Risky Technology, Culture, and Deviance at NASA* (University of Chicago Press, 1997).
- 33 Kathleen J. Tierney, "From the Margins to the Mainstream? Disaster Research at the Crossroads," *Annual Review of Sociology* 33, no. 1 (2007): 503–525.

While research on how organizational routines can produce technological disasters has been explored at length, how routines and practices that are characteristic of insurance organizations bear upon the characteristics and outcomes of natural disasters has been under-explored. Instead, most research on insurance as an institution composed of organizational routines has focused on how insurance routines govern moral risks. Using technologies of surveillance and risk un-pooling, insurers exclude individuals deemed morally risky from preferred risk categories and, consequently, from full participation in freedoms that insurance affords.³⁴ Insurance routines promote the treatment of insureds as suspects and the treatment of claimants as offenders – due to the presumption that individuals will act with moral hazard.³⁵ Insurance routines monitor policyholders and subject their persons and properties to inspection,³⁶ manipulate policyholder behavior through imposing contractual incentives and penalties,³⁷ segregate policyholders into classes that are afforded different benefits and charged different prices,³⁸ and minimize the costs of policyholder claims.³⁹

34 Richard Victor Ericson, Aaron Doyle, and Dean Barry, *Insurance as Governance* (University of Toronto Press, 2003); Tom Baker, “Insurance in Sociolegal Research,” *Annual Review of Law and Social Science* 6, (2010): 433–447.

35 Ericson, Doyle, and Barry, *Insurance as Governance*.

36 *Ibid.*

37 Carol A. Heimer, *Reactive Risk and Rational Action: Managing Moral Hazard in Insurance Contracts* (University of California Press, 1985).

38 Ericson, Doyle, and Barry, *Insurance as Governance*; Richard Ericson, Dean Barry, and Aaron Doyle, “The Moral Hazards of Neo-liberalism: Lessons from the Private Insurance Industry,” *Economy and Society* 29, no. 4 (2000): 532–558.

39 Carol A. Heimer, “Insuring More, Ensuring Less: The Costs and Benefits of Private Regulation Through Insurance,” in *Embracing Risk: The Changing Culture of Insurance and Responsibility*, ed. by Tom Baker and Jonathan Simon (University of

But just as insureds have the potential to engage in morally hazardous actions, so too do insurers through organizational routines that may exclude individuals and groups who need insurance the most, withhold payment on losses to which insureds are entitled, and compel policyholders to rely on the legal system in order to collect their entitlements.⁴⁰ Routines and practices of insurance are not only relevant for governing who has access to the benefits of insurance, what they are charged for their participation, and to what surveillance and sanctioning they must be subject, they are also relevant for whether the risks transferred from insureds to insurer are what insureds need and expect and how benefits of insurance will be disbursed when benefits are claimed. It is reasonable to expect that routines and practices of insurance organizations may potentially magnify – not just ameliorate – the disasters that individuals, households, and families face.

SATISFIED WITH WHAT?

Contentions that insurance works well, on the basis of consumer satisfaction studies that report high rates of satisfaction among policyholders, are suspect due to common methodological limitations of satisfaction surveys. Survey research on consumer satisfaction does not often distinguish between partial and total losses, making such studies of little utility for evaluating the operation of insurance for large disaster losses. By surveying the entire population of insurance consumers – including those who have never had claims or who have had only had small claims – reports by individuals who

Chicago Press, 2002).

40 Ibid.; Ericson, Barry, and Doyle, “The Moral Hazards of Neo-liberalism.”

have experienced large losses are drowned out by the large number of other respondents whose situations are qualitatively different. When people who have never had to use their home insurance benefits for a large loss report on their “satisfaction” with companies, what exactly are they considering? Perhaps these individuals like their agents and other general interactions with the company, how the company has handled previous small claims, premium amounts, or insurer reputations. The overwhelming majority of people who report on their satisfaction with insurers have never fully relied upon the product they are being asked to evaluate in cases where performance matters most.

Survey research that explicitly targets consumer claims experiences rather than general consumer satisfaction is more informative, but not by much. Such studies show a higher incidence of consumer complaints, but they often lump small claimants together with large loss claimants. The market research firm JD Power and Associates reports that consumer satisfaction with insurance claims has declined significantly since 2004, especially in areas frequently hit by disaster – including the Gulf States and California. Of consumers who have made a claim with their insurers, consumers are more frequently satisfied with their insurance agent than they are with their claims professional.⁴¹ Results from a Consumer Reports survey exhibit a similar pattern: 25 percent of respondents who had filed claims reported having problems. In particular, 5

41 Bowler and Tenerovich, 2009 Home Claims Satisfaction Study. Reporting losses to company call centers, loss appraisal, the repair process, and settlement scored in the middle of the JD Power index, meaning that consumers were satisfied less frequently with these things compared to the frequency with which they were satisfied with their agents, and more frequently satisfied with them compared to their claims professional.

percent indicated their claims were rejected and 11 percent said they received too little payment for their claims.⁴² Since these figures are drawn from responses of people who have had any kind of insurance claim, large or small, their ability to describe the consumer experience of large losses is limited. Though, the Consumer Reports survey can hint at what kind of patterns might be found among large loss victims; the survey report includes separate statistics describing the experiences of Hurricane Katrina claimants. Hurricane Katrina claimants had, on average, a \$15,000 claim – an amount more than three times the average claim value in the entire study. Half of Katrina claimants surveyed reported claims problems – double the proportion of all claimants in the study who reported problems. Specifically, 26 percent of Katrina claimants say they were paid too little and 21 percent say that they had delayed payments. Only 51 percent of Hurricane Katrina claimants reported being highly satisfied with their insurer, compared with 74 percent of others.⁴³ Even these results are limited: they include a preponderance of mid-range, partial losses. An individual who has sustained a \$30,000 loss is materially in a different circumstance than an individual who has lost an entire home whose replacement cost is upwards of \$200,000.

42 It appears that claims problems are not experienced with the same frequency across all consumers. There is reason to believe that there is considerable variation in claims experiences, depending upon the insurer. In the Consumer Reports survey, 35 percent of Allstate clients reported having claim problems. By contrast, 14 percent of Amica clients reported problems. Based on this measure and others, Consumer Reports selected Amica as the best insurer overall. Other insurers recommended by the magazine include USAA, which is available only to veterans and active-duty military personnel, as well as Chubb, which is available only for high-value properties and homes. “Insuring Your Home: How to Find the Best Coverage for Whatever Comes Your Way.”

43 Ibid.

To the extent that statistics for claims process, claims outcomes, and subjective measures of satisfaction are generated predominantly using responses from individuals who have either not made a claim against their insurance companies or have made only small claims, these statistics are of little use in determining the performance of insurance after large disaster loss in the situations where insurance is needed most.⁴⁴ Such surveys are of little utility in evaluating the extent to which insurance compensation paid to insured disaster survivors is sufficient to cover the full extent of their losses – especially when those losses are total.

A CHANGED HOME INSURANCE MARKET

Disaster research studies that have explored the sufficiency of home insurance compensation paid to insured survivors following disaster loss are of limited generalizability to present conditions in the home insurance market: they were

44 Like results from most insurance consumer satisfaction surveys, the low rate of complaints filed by consumers at many state insurance departments is misleading. First, since the divisor used to produce claims complaint ratios is often the number of policies active in a year – rather than the number of losses – the size of the ratio is suppressed by the simple fact that losses are very infrequent relative to the number of policies in effect. Indeed, this is similar to insurance consumer satisfaction surveys that sample the entire population of insurance consumers – not just those who have had to use insurance for a large loss. Second, the jurisdiction of the state department of insurance pertains to whether there has been concrete evidence of an insurance code violation – not necessarily a finding that the insurer has violated the insurance contract. Third, insurance consumers may not report their problems to departments of insurance for a whole host of reasons, including but not limited to: not knowing that a complaint process exists; not believing in the efficacy of filing a complaint; concern for retaliation by company adjusters in the handling of open claims (insurers are apprised of which policyholders have made complaints against them); and concern about being dropped by their insurers – a real issue for those living in high risk areas where securing affordable insurance coverage can be challenging.

conducted during a particularly unique time in insurance history, which was during the roughly 15 year period in which guaranteed replacement was widely available to consumers in the home insurance marketplace. Policies with guaranteed replacement provisions entitled homeowners to claim compensation above policy limits, if necessary, to repair or rebuild their homes after large loss.⁴⁵ In addition, after the high profile disasters of the period, some insurers reportedly treated policyholders who did not have guaranteed replacement coverage as if they did, since the insurer could not always legally prove that the “guaranteed replacement” option had been offered to that eligible policyholder and was rejected.⁴⁶

Claims costs in the late 1980s and early 1990s disasters – the Loma Prieta earthquake (1989), the Oakland Hills fire (1991), Hurricane Andrew (1992), and the Northridge earthquake (1994) – were much larger than expected, which industry insiders blamed in part on the decision of insurance commissioners to require insurers to pay additional claim compensation beyond what insurers deemed reasonable.⁴⁷ The high, unexpected disaster losses of the period led most insurers to eliminate guaranteed replacement coverage and return to capped coverage.⁴⁸ Today, typical home replacement cost insurance policies have policy limits plus a percentage extension that can be

45 Homeowners Insurance: Threats from Without, Weakness Within, ISO Insurance Issues Series (Insurance Services Office, 1996).

46 Homeowners Insurance, 1993-1995: Rebuilding After Andrew (Conning & Company, 1993).

47 Ibid.

48 Greg Nelson, “Hurricanes, Fires, and Other Catastrophes: Are You Underinsured?,” CPCU eJournal 58, no. 1, 1–13; Peter M. Wells, Insuring to Value: Meeting a Critical Need (National Underwriter Company / Marshall & Swift/Boeckh, 2007).

collected beyond policy limits if policy limits are insufficient.⁴⁹ Widespread elimination (or severe reduction) of guaranteed replacement cost benefits, which amounts to the imposition of a home insurance coverage cap, was one of the many strategies insurers used to limit their catastrophe exposures.⁵⁰ The effect on homeowners is that the reduction in insurance benefits brought by the near-elimination of guaranteed replacement provisions created the potential for insurance policy caps to be insufficient in the event of total loss.⁵¹

Since much disaster research that has engaged meaningfully with questions about insurance adequacy was conducted during the guaranteed replacement period, findings generated during that period need to be reexamined in light of market changes since that time. Indeed, the eventual need to reexamine home insurance was prefigured by one scholar who wrote about housing recovery after disaster in the late 1990s; she predicted that the changes she saw coming down the home insurance pipeline could leave disaster survivors in future disasters with limited coverage and limited capital for rebuilding.⁵²

49 Ricardo Echeverria, *Handling Under-Insurance Cases Against Insurance Companies, Agents and Brokers* (Shernoff, Bidart, Darras, Echeverria (Law Office), 2009), <http://shernoff.com/legal-publications/Handling-Under-Insurance-Cases.pdf>.

50 Moody's Investors Service, "U.S. Property and Casualty Insurance: Let Consolidation Begin," news release, April 1995.

51 As the Consumer Federation of America has written, "insurers have sharply hollowed out the catastrophe coverage offered to consumers in recent years by placing a number of new requirements on policyholders and limits on coverage in policies" where some of these changes include "caps on replacement cost and other limits on needed coverage" (p. 4) J. Robert Hunter, *The Insurance Industry's Incredible Disappearing Weather Catastrophe Risk: How Insurers Have Shifted Risk and Costs Associated With Weather Catastrophes to Consumers and Taxpayers* (Consumer Federation of America, 2012).

52 Mary C. Comerio, "Housing Issues After Disasters," *Journal of Contingencies and*

CLAIMS PROCESS AS GAUNTLET

Investigative books, articles, and television programs have – in recent years – called property claims practices by some major insurance companies into question.

Specifically, these reports contend that the burdensome nature of the claims leads policyholders to give up the pursuit of their full entitlements, which saves claims costs for insurers.

A recent spate of publicity around insurer claims practices began with an investigation of Allstate by insurance plaintiff attorney, David Berardinelli. According to Berardinelli, Allstate hired management consulting firm McKinsey and Company in the early 1990s to revamp Allstate’s claims management practices. In 1992, Allstate adopted the McKinsey plan, which was called the Claims Core Process Redesign (CCPR) system. McKinsey trained Allstate staff on the new approach using a set of slides, which are known in insurance circles as the “McKinsey Slides.” The slides show that McKinsey advised Allstate to treat policyholders who seek compensation beyond the company’s initial offer with “boxing gloves,” while treating those individuals who accept Allstate’s first settlement offer with “good hands.”⁵³ Berardinelli alleges that the plan was intended to allow Allstate to pay out less in claims to policyholders and more

Crisis Management 5, no. 3 (1997): 166–178; Comerio, *Disaster Hits Home*.

- 53 David J. Berardinelli, *From Good Hands to Boxing Gloves: The Dark Side of Insurance* (Trial Guides, 2008). On Friday, April 4, 2008, Allstate made the documents public. The McKinsey slides are available here: <http://www.allstatenewsroom.com/categories/52/releases/4390> (Last accessed January 25, 2010). The online release of roughly 150,000 slides omitted materials specifically related to catastrophe claims: Rebecca Mowbray, “Allstate’s Online Posting Skips Over Catastrophe Claims,” *Newhouse News Service*, April 14, 2008.

to investors.⁵⁴ His investigation led to follow-on stories about Allstate's claims practices in *BusinessWeek*, *Bloomberg Markets*, *Money*, and on the long-running public affairs television show, *NOW*.

While Allstate has borne the brunt of the negative publicity around hardball claims tactics, techniques allegedly used by Allstate may be more or less standard industry practice.⁵⁵ Allstate was apparently not the only insurer to retain the services of McKinsey; the consulting firm has also done work for Farmers Insurance Group, USAA, and State Farm, leading some to contend that McKinsey has been a “key architect of claims practices in use across the insurance industry today.”⁵⁶

Financial data on insurers, analyzed by insurance consumer advocates, further supports the contention that insurers are paying out less in claims than they did decades ago. The industry's pure losses – the amount paid in claims—represented about 55 percent of premiums in 2007, down sharply from about 67 percent in 1987.⁵⁷

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- 54 Many practices McKinsey recommended to Allstate are still in use by the company, though some have been modified due to regulatory and legal challenges: Michael Orey, “In Tough Hands At Allstate,” *BusinessWeek*, April 30, 2006, <http://www.businessweek.com/stories/2006-04-30/in-tough-hands-at-allstate>.
- 55 Jay M. Feinman, *Delay, Deny, Defend: Why Insurance Companies Don't Pay Claims and What You Can Do About It* (Penguin, 2010).
- 56 Orey, “In Tough Hands At Allstate.” See also David Dietz and Darrell Preston, “Home Insurers' Secret Tactics Cheat Fire Victims, Hike Profits,” *Bloomberg Markets Magazine*, August 3, 2007.
- 57 J. Robert Hunter, *Property/Casualty Insurance in 2008: Overpriced Insurance and Underpaid Claims Result in Unjustified Profits, Padded Reserves, and Excessive Capitalization* (Consumer Federation of America,), http://www.consumerfed.org/elements/www.consumerfed.org/file/finance/2008Insurance_White_Paper.pdf. According to Hunter, insurer reduction in claims payouts accompanied a period in which insurers had large and growing profits.

Former California Insurance Commissioner John Garamendi has been critical of the insurance industry, going on the record to say that insurer claims practices are intentionally consumer unfriendly. He was quoted in a 2007 *Bloomberg Markets* article and on *NOW* as saying: “The first commandment of insurance is, ‘Thou shalt pay as little and as late as possible.’”⁵⁸ The alleged effects of insurer claims practices on homeowners who have sustained losses calls the function of home insurance into question.

INADEQUATE INSURANCE COMPENSATION

Technical reports issued by governmental organizations and NGOs have suggested that the safety net of private insurance may not be working well even for those previously thought to be well-served by home insurance. A white paper published through the Congressional Research Service argued that there has been widespread dissatisfaction with claims payouts in the aftermath of recent disasters; after Hurricane Isabel in 2003, Hurricane Katrina in 2005, and California wildfires since the Oakland fires, homeowners have complained that their claims payouts are substantially lower than the amount it costs to replace and rebuild.⁵⁹ The National Research Council suggested, in a 2006 report, that even well-insured individuals take on debt in the aftermath of

58 Dietz and Preston, “Home Insurers’ Secret Tactics Cheat Fire Victims, Hike Profits.” See also, *NOW* transcript, show 333, August 17, 2007. <http://www.pbs.org/now/transcript/333.html>

59 Rawle O. King, *Hurricanes and Disaster Risk Financing Through Insurance: Challenges and Policy Options* (Congressional Research Service, 2005).

disaster⁶⁰ – an observation that indicates the potential for insurance insufficiency in disaster contexts among a population of individuals traditionally thought to face few disaster recovery issues.

In what situations of total loss would insurance payouts be inadequate? One situation might involve a disagreement between the policyholder and the insurer about the value of the property at the time of loss. The insurer may withhold further payment on a claim on grounds that the homeowner's estimate of property value is unreasonable. A second situation is inadequate coverage: the amount of coverage available under one's insurance policy is not sufficient to pay the full amount of the loss. This is the situation of underinsurance.

THE POST-DISASTER PROBLEM OF UNDERINSURANCE

Underinsurance is the condition of having policy limits that are insufficient to cover the costs of rebuilding a destroyed home at the same location using similar materials, construction standards, design, and quality of workmanship.⁶¹ Since insurable values and policy limits are determined prior to loss, underinsurance is a condition with a pre-disaster inception date and post-disaster consequences.

The majority of American homeowners appear to be underinsured and have been for some time. Since the early 1990s, the leading provider of construction cost estimation data to the insurance industry, Marshall & Swift/Boeck (MSB), has measured

60 National Research Council of the National Academies, *Facing Hazards and Disasters*.

61 Wells, *Insuring to Value: Meeting a Critical Need*.

underinsurance by conducting a survey of homes to compare insurance policy values with construction costs. In 2008, MSB concluded that 64 percent of U.S. homes were underinsured; among those, “the average homeowner has enough insurance to rebuild only about 81 percent of his or her dwelling.”⁶² In every year that MSB has released its annual survey report, the survey has revealed the vast majority of homeowners to be underinsured. As Insurance Information Institute (III) spokesman and chief economist Robert P. Hartwig remarked, “the underinsurance problem lies just beneath the surface all across the country,” that “the problem is everywhere,” and that “disasters simply expose it.”⁶³ Former California Insurance Commissioner Steve Poizner has called underinsurance a “common” situation for many homeowners.⁶⁴

Underinsurance can be devastating for individuals who have the great misfortune of sustaining a total loss. In the words of former California Insurance Commissioner John

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- 62 Marshall & Swift/Boeckh, “California Wildfires Highlight Need to Protect Homes Against Underinsurance,” news release, August 17, 2009, <http://www.marshallswift.com/pressreleases.aspx?ReleaseID=15>. Though, as one journalist reports, the situation has apparently improved since 1996, when MSB first started publishing underinsurance statistics. At that time, MSB estimated that 73 percent of homes were covered, on average, for only 65 percent of the compensation required to rebuild: Jeff Bertolucci, “Less of a Cushion,” *Los Angeles Times*, November 28, 2004, <http://articles.latimes.com/2004/nov/28/realestate/re-insure28>.
- 63 Treaster, “Homeowners Come up Short on Insurance.” Yet Candysse Miller, spokeswoman for the Insurance Information Network of California (IINC), a California-specific organization that operates under the umbrella of III, apparently denies that the problem is widespread, saying that the issue of underinsurance generated “a lot of headlines” but was not a “sweeping problem” after California’s wildfires of 2003: Kathy Chu and Elizabeth Weise, “Wildfires Spotlight Insurance Coverage Issues,” *USA Today*, November 2, 2007.
- 64 Marc Lifsher, “Wildfires Heat up Debate on Rising Rebuilding Costs; Are Policies Adequate to Help Make Homeowners Whole,” *Los Angeles Times*, June 6, 2008.

Garamendi, underinsured homeowners who have lost homes in disaster are “forced to pay much of the rebuilding costs from their own pockets.”⁶⁵ In the best underinsurance cases, individuals manage to scrape together the required resources in order to overcome their home insurance gap and rebuild. While some policyholders may have ready access to savings or credit that they can draw upon, others remain in temporary housing for years as they try to cobble together enough money and/or building supplies to begin or finish reconstruction.⁶⁶ Sometimes disaster survivors who have lost homes may try to do the construction work themselves, without a contractor – a strategy that one construction loss valuation expert indicated that many 2003 California wildfire survivors adopted in the face of underinsurance.⁶⁷ In the worst cases, underinsurance can prevent disaster survivors who intend to rebuild from rebuilding at all. The consequences of underinsurance accrue not only to individuals, but to entire disaster-affected communities through slow housing reconstruction rates – a major impediment to community recovery.

From the vantage point of some disaster recovery workers, underinsured disaster survivors have circumstances that are worse in some ways than survivors who have no

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- 65 California Department of Insurance, “Insurance Commissioner John Garamendi Unveils ‘Disturbing’ Report on Insurer Handling of Claims Following Devastating Southern California Wildfires,” news release, October 25, 2004.
- 66 The California Department of Insurance concluded, only 6 percent of San Diego County homeowners with total losses had rebuilt their homes and obtained an occupancy permit by one year after the fire. The report indicated that insurance was a possible cause: “When consumers are unable to settle their insurance claims or insurers delay in paying the proper amount to rebuild the home, the permit and rebuilding process can be greatly delayed.” *Ibid.*
- 67 Interview with a reconstruction expert, January 2009. The expert has been in the business of valuing structure losses following disaster since the early 1990s.

insurance at all: “all the agencies move into play to help [uninsured survivors], so they get movement toward recovery much faster.”⁶⁸ Voluntary and charitable organizations (as well as government programs like FEMA) are quick to help individuals without any kind of insurance, but not as eager to support individuals with inadequate coverage.⁶⁹

For many disaster survivors who found themselves with inadequate insurance coverage to rebuild their homes and replace their properties, the fact that they were underinsured probably came as shock. A recent survey of homeowners, conducted by Zogby/MetLife Auto & Home and reported in *Insurance Journal* reports that more than 70 percent of survey respondents believed that “insurance pays for the full cost to rebuild their property in the event of a major loss, such as a fire or other natural disaster.”⁷⁰ Among homeowners who have testified at post-disaster hearings, the notion that they did not know that they were underinsured was a common refrain.

Despite insurance regulatory hearings to investigate why “homeowners continue to be under-insured, in many cases by hundreds of thousands of dollars in the event of a

68 Interview with a community recovery worker, June 2008. Indeed, this sentiment is shared by a number of individuals in the disaster assistance community. As one consumer advocate explained, “it’s not like we’re helping the homeless, we’re helping people who had enough resources to buy insurance. But it’s still a social justice issue, because you are entitled to what you paid for. And some of the families that we have encountered really need the money to move on with their lives. The emotional issues, the financial issues, and other issues that families face are serious.” Interview with insurance consumer advocate, August 2008.

69 As one disaster recovery organizer explained, “within one month of the fire, I received two offers from churches to rebuild a home for an uninsured survivor I was helping.” Interview with a community recovery worker, June 2008.

70 “Homeowners Coverage Knowledge Gap Wide Among Consumers,” *Insurance Journal*, August 24, 2010, <http://www.insurancejournal.com/news/national/2010/08/24/112704.htm?>

total loss such as a wildfire,”⁷¹ and after policy changes aimed to expand consumer rights,⁷² underinsurance persists. The consequence is that household recovery after disaster follows a familiar pattern: each new disaster creates a new set of survivors who are surprised to learn that their coverage does not cover the costs to rebuild their homes and who find themselves in a position of having to find ways of overcoming a sometimes large home insurance gap in order to reconstruct their wealth, quality of life, and routines.

THE EMPIRICAL QUESTIONS

In this dissertation, I address two main questions. First, how can widespread underinsurance be explained as a stable condition of the U.S. market for homeowners insurance? Second, what are the consequences of underinsurance for families who have lost their homes in disaster?

Establishing underinsurance as a condition that greatly affects the process and outcomes of household disaster recovery contributes to the sociology of disaster and the interdisciplinary field of “disaster research.” For the most part, projects in these fields have tended to focus on the difficulties faced by households without insurance, insurance difficulties faced by individuals with disreputable companies, and the

71 California Department of Insurance, “On Anniversary Eve of Devastating 1991 Oakland Hills Fires Insurance Commissioner John Garamendi Joins Survivors to Underscore the State’s Continuing Crisis in Coverage,” news release, October 18, 2004.

72 For a complete list of the post-2003 changes, please see the page on the California DOI website called “Laws Enacted Subsequent to 2003 Southern California Wildfires,” <http://www.insurance.ca.gov/consumer-alerts/2007newlawsnoticecawildfire.cfm>.

tendency of members of vulnerable groups to perceive greater claims problems than their more advantaged counterparts. As I will show, just because a household has a standard insurance policy in place, with a reputable insurer, does not imply that timely and complete recovery of that household is a foregone conclusion. Indeed, the truth is quite to the contrary.

Establishing underinsurance as highly consequential for the process and outcomes of household disaster recovery also contributes to the new institutionalism in sociology – of which one contribution to the field has been to recognize that large organizations, since the Industrial Revolution, have become trusted substitutes for what small groups and individuals used to do for one another.⁷³ Widespread underinsurance challenges conceptions about the role of insurance as a complete substitute for mutual assistance, self-help, and informal aid exchanged between members of the social body that once performed the function of insurance.⁷⁴ Disaster is a natural context to evaluate the extent to which insurance is a functioning institutional solution for the problem of safeguarding against personal (and familial) misfortune.

The explanation I will offer for why underinsurance persists as a stable condition in the United States home insurance market challenges approaches that insurance economists and behavioral economists would take to explain inadequate insurance coverage. Conventional explanations in insurance economics and behavioral economics might be readily marshaled to explain underinsurance as a matter of rational, non-

73 Lynne G. Zucker, “Production of Trust: Institutional Sources of Economic Structure, 1840–1920,” *Research in Organizational Behavior* 8, (1986): 53–111; Perrow, “A Society of Organizations.”

74 Zucker, “Production of Trust.”

rational, or biased consumer choice – or as an information asymmetric “market for lemons.” I show how both explanations – the idea that underinsurance is a choice and the idea that underinsurance represents a market for lemons in home insurance due to the inability for consumers to perceive quality – cannot completely account for the particular reality of home insurance supply and demand in the United States.

Finally, the research presented here contributes to economic sociology.

Contemporary economic sociologists have tended to focus on problems in markets that are caused by uncertainty and how uncertainty is resolved through formal or informal institutions; socially shared understandings, conventions, and formal and informal rules guide interaction among actors, define products, and produce stability for actors.⁷⁵

Reduction of uncertainty is assumed to mean that actors have replaced some of their uncertainty with better understandings. Yet, this dissertation shows an economic context in which market conditions promote what I call “false certainty” among actors – in particular, this case is one in which consumers tended to have false certainty in the function of a product or service. In this market, what a product or service typically functions to do is different, in substantial ways, from what consumers believe. To develop the concept of false certainty, I draw upon insights from classical sociology and cognitive/cultural sociology.

METHODS

I rely on two main research methodologies in this analysis. The first is in-depth

75 Neil Fligstein and Luke Dauter, “The Sociology of Markets,” *Annual Review of Sociology* 33, no. 1 (2007): 105–128.

fieldwork involving interviews and observations, focused around the 2003 and 2007 San Diego area wildfires. The second is analysis of historical and contemporary insurance industry documents, drawn mainly from the post-WWII period.

Between February 2008 and January 2009, I conducted qualitative fieldwork to explore insurance transactions in the context of two periods of massive wildfire in San Diego County, in October 2003 and October 2007.⁷⁶ The fires were responsible for destroying thousands of homes: the 2003 wildfires destroyed 2,454 homes⁷⁷ and the 2007 wildfires destroyed more than 1600 homes.⁷⁸

I conducted in-depth interviews with 46 insured homeowners who had sustained total home losses in the 2003 wildfires.⁷⁹ I also interviewed six insurance agents and adjusters, six consumer advocates, five disaster recovery workers, two staff members at the California Department of Insurance, and one expert witness who specializes in valuing property losses.

Interviews with fire survivors who had lost their homes in 2003 yielded retrospective views on household recovery by individuals who had more than four years of post-disaster recovery experience. In those interviews, disaster-affected individuals

76 In both October 2003 and October 2007 there were multiple simultaneous wildfires burning in San Diego County. Fires were separately named by officials based on differences in their origin and motion during the burn period. For my purposes, the different naming distinctions are not relevant.

77 William Campbell, Governor's Blue Ribbon Fire Commission: Report to the Governor (Office of the Governor, State of California, 2004).

78 2007 San Diego Firestorms After Action Report (Office of Emergency Services, County of San Diego, 2007).

79 Some of these interviews were conducted over the phone.

explained the coverage they had in place at the time of the loss, how they came to have the coverage they did, their understandings of insurance, and the chronology of their claims. Interviews with community advocates, insurance personnel, regulators, and the expert witness provided useful background on the nature and organization of the homeowner insurance market, relevant law, insurance politics, and insurer practices. Some of these interview subjects had great insight and experience working with disaster-affected individuals on their insurance claims.

In addition to 65 in-depth interviews with individuals who had sustained total home losses and others, my fieldwork involved ethnographic participant-observation of community recovery and insurance consumer advocacy activities. In that capacity, I observed more than 60 meetings of 2007 wildfire-affected individuals, eight meetings of long-term recovery workers, and informal assistance provided to fire survivors at area recovery centers.⁸⁰ As a participant-observer, I was able to watch the process of long-term community disaster recovery unfold.⁸¹ This perspective afforded a stage-by-stage view of where most households were at in the recovery process at each point after the fire, as well as the nature of the underinsurance challenges fire-affected households were facing in real time.

80 Some meetings were observed by my research assistant. There were so many meetings going on around the county, that it was impossible to keep up with all of them – especially considering the long driving distances between the far northern fire-affected parts of the county and the far southern fire-affected regions.

81 I had originally planned to interview fire survivors who lost homes in October of 2007, however, I soon learned that their difficult emotions and hectic recovery tasks would make it extremely difficult to follow through with that plan. They were upset, they had no time, and they tended to look toward me for answers – a request I could not ethically oblige. Consequently, I decided against interviewing individuals who had lost homes in October 2007.

Besides field data, I relied heavily on documents, videos, and artifacts concerning insurance and disasters in the United States. Insurance industry sources included insurance manuals, claim valuation guides, industry periodicals, keynote addresses delivered by insurance executives at meetings, insurance organization meeting minutes, insurer press releases and industry brochures.⁸² I used these materials to research the history of underinsurance, insurance to value, and various strategies the industry has used to promote adequate coverage for policyholders. Other sources included congressional hearings, pamphlets put out by disaster assistance organizations, government reports and nonprofit publications, and journalistic articles concerning previous United States disasters.

The purpose of the historical analysis was to explore the extent to which insurers have been able, historically, to supply adequate insurance to value to policyholders. It appears that underinsurance has a long history in the home insurance market: it was recognized as a problem within the insurance industry as early as the 1940s – judging by the midcentury appearance of articles, brochures, statistical reports, and op-eds on the topic in industry publications. Just as is the case today, underinsurance was defined as a mismatch between the actual insurance limits carried and the replacement costs of homes and personal property.

82 A major source of historic insurance materials was the Shelby Cullom Davis Library at St. John's University in Manhattan. The holdings cover more than a century of insurance history: the library collection was started in 1901, when insurance industry executives formed the Insurance Society of New York. For the history of the Davis Library, see <http://www.stjohns.edu/academics/libraries/campus/davis/About/History.stj>. Special thanks to Tom Baker at Penn Law who informed me of the existence of the Davis library and its holdings.

A second major source of documents was the California Department of Insurance. I visited the department on two occasions where I reviewed “rule making files” for a number of insurance underwriting and claims regulations⁸³ and where I reviewed documents pertaining to the Oakland Fire (1991) and Northridge Earthquake (1994). The files included statements made by insurers in reaction to proposed regulations, and as such, were useful for understanding constraints faced by the industry as well as how insurance organization executives (and lawyers) conceptualized the insurance transaction.

ROADMAP

To explain the causes and consequences of home underinsurance, I cover three general terrains: insurance supply, insurance demand, and how inadequate insurance magnifies the difficulties individuals experience in the process of household disaster recovery.

In Chapter 2, I discuss supply side contributions to widespread underinsurance. I offer a history of underinsurance and how organizations and individuals within the insurance industry, have attempted – and failed – to provide adequate insurance to value to policyholders due to the difficulty of valuing property according to methods that are both accurate and cost-effective. As I will argue, using historical evidence, it would be

83 Rule making files are all the documents that are recorded by the California Department of Insurance (CDI) that pertain to a proposed change to the Insurance Code. Since a public comment period is required for changes to the code, the rule making files include comments from interested stakeholders. The rule making files also include public hearing transcripts, written explanation by CDI for proposing a regulatory change, responses of CDI to submitted comments, and the final statement of reasons CDI gives for the regulations the department decides to (or decides not to) implement.

an oversimplification to contend that consumers do not demand adequate coverage or that they are not willing to pay for better coverage – even though consumer buying patterns of optional flood and earthquake coverages might naively suggest this to be the best explanation.

In Chapter 3, I provide a theoretical framework for understanding underinsurance by developing the concept of “false certainty,” which is a term I use as a complement to the concept of “uncertainty” to develop the possibility that there can be widespread, mistaken expectations of what a product or service functions to do. I build upon insights advanced within classical sociology and cognitive/cultural sociology to emphasize the primacy of prior experience in forming expectations of transactions.

In chapter 4, I give background to the 2003 and 2007 San Diego wildfires. Both episodes of fire destroyed thousands of homes in the San Diego area, in suburban, exurban, and rural areas. After both fires, disaster assistance organizations found that many homeowners had insufficient compensation available under their policies to rebuild.

In chapter 5, I use the San Diego fieldwork to demonstrate the utility of the concept of “false certainty.” Using empirical evidence drawn from fieldwork conducted in San Diego, as well as from insurance industry materials, I show how features of the insurance market – including personal interactions, previous small claims experiences, and lay understandings of provisions in the insurance contract – supported understandings among fire survivors that their policies would be adequate in the event of loss.

In chapter 6, I describe the consequences of underinsurance for the household disaster recoveries of San Diegans who lost their homes in the 2003 and 2007 wildfires. Many of the stories my interview subjects told about their claims experiences are consistent with the kinds of claims complaints that have been aired in public forums and congressional hearings by previous disaster survivors.⁸⁴ Many of the individuals I interviewed appeared to be significantly underinsured. For some, their underinsurance was a reason they gave for not being able to rebuild. Others were able to rebuild despite their home insurance gap by implementing three main strategies: negotiating, barn raising, and downsizing. I discuss the implications of underinsurance for how disaster researchers understand household disaster recovery.

Chapter 7 is the conclusion.

84 Besides hearings held in the aftermath of the San Diego Fires, other hearings include: *Oakland Hills Firestorm: Insurance Issues*, California Senate Committee on Insurance, Claims and Corporations (1993); *The Department of Insurance: In Rubble After Northridge: Recommendations for Rebuilding Public Confidence* (Sacramento, CA: Senate Publications, 2000).

CHAPTER 2: FAILING TO FULLY VALUE

[T]he National Underwriter asked several companies to check current loss reports for examples of underinsurance. The evidence they are supplying reveals widespread incidents of seriously inadequate coverage. Many insured are paying an amazingly large portions of their own losses or are running the grave risk of doing so – and insurers are getting only a fraction of the premium to which they are entitled, and which they need to pay losses. In these examples, insurance has failed to perform its function, for insured or insurer.¹

Since at least the 1930s, insurers and insurance professionals have publicly proclaimed the difficulty of ensuring that dwellings are adequately “insured to value.” Industry reports, statements made by industry spokesmen, and other publicly-available historical materials released in every decade since the 1930s have revealed a condition of widespread home underinsurance. Moreover, these materials indicate that insurers have repeatedly attempted to resolve home underinsurance – but have met with little success. Adequate dwelling insurance-to-value has been an unattainable ideal for the property insurance industry.

The history presented here – of longstanding, widespread underinsurance that has

1 “Current Examples of Underinsurance Many, Widespread: Seriously Inadequate Cover Experienced by All Sizes of Risks, Coinsured or Not,” *The National Underwriter* 61, no. 8 (1957).

characterized the American home insurance market over a roughly 70 year period – complicates explanations of inadequate insurance that are drawn from behavioral economics and insurance economics. If contemporary research findings on insurance inadequacy were to be applied toward understanding underinsurance, those findings would suggest that underinsurance results primarily from “demand-side” issues, in terms of how risk perceptions, emotions, and cost-benefit analyses shape insurance purchasing decisions among consumers.

Yet, this chapter aims to show that while it is likely the case that demand-side issues contribute to underinsurance – a subject that will be taken up at length in Chapters 3 and 5 – inadequate insurance coverage for losses caused by covered perils can, in large part, be explained as the inability of insurers to supply insurance-to-value. Valuation strategies and technologies implemented by insurers have been unable to fully overcome uncertainty and complexity, due to inflationary trends in costs of home reconstruction, post-disaster market conditions, and the idiosyncrasies of particular homes located on particular properties – among other factors. The finding that insurer valuation algorithms and methodologies have routinely failed to generate accurate home reconstruction costs is consistent with previous sociological work that has highlighted divergences between valuation technologies institutionalized in markets and the underlying qualities those technologies aim to value.²

2 Akos Rona-Tas and Stefanie Hiss, “The Role of Ratings in the Subprime Mortgage Crisis: The Art of Corporate and the Science of Consumer Credit Rating,” *Research in the Sociology of Organizations*, no. 30 Part A (2010): 115–155; Akos Rona-Tas and Stefanie Hiss, “Forecasting as Valuation: The Role of Ratings and Predictions in the Subprime Mortgage Crisis in the United States,” in *The Worth of Goods: Valuation and Pricing in the Economy*, ed. by Jens Beckert and Patrik Aspers

Longstanding, widespread underinsurance can be understood as the outcome of struggles, over a long period of time, among actors in the insurance industry to assign values to homes. The valuation techniques that insurers have used to value homes have evolved historically, as industry actors have defined and redefined barriers to producing valuations that match what policyholders expect and what insurers have historically viewed as essential for profitability. As such, this chapter demonstrates that valuations in home insurance are consistent with Marion Fourcade's claim that valuation is situated both culturally and historically.³

DEFINING HOME INSURANCE

When policyholders buy any kind of insurance, they buy a promise from their insurer to indemnify them against particular losses specified in their policies. Whether the insurance product is life insurance, health insurance, home insurance, disability insurance, or any other kind of insurance, at the crux of the insurance business is valuation. In order to assess which risks to accept and how many risks to assume, in terms of projected loss costs and the revenue required to offset those projected loss costs, insurers assign valuations to the persons, events, and property insured. Implicit in any kind of insurance products are forecasts: forecasts for the likelihood of future losses

(Oxford University Press, 2011); Richard Swedberg, "The Structure of Confidence and the Collapse of Lehman Brothers," *Research in the Sociology of Organizations*, no. 30 Part A (2010): 71–114; Bruce G. Carruthers and Barry Cohen, "Calculability and Trust: Credit Rating in Nineteenth-century America" (presented paper, Transitions to Modernity Colloquium, MacMillan Center, Yale University, September 20, 2010).

- 3 Marion Fourcade, "Cents and Sensibility: Economic Valuation and the Nature of 'Nature'," *American Journal of Sociology* 116, no. 6 (2011): 1721–77.

on risks included (or potentially included) in an insurer's book of business, the values of future losses on those risks, and the premium required to give insurers confidence that those risks will be profitable investments.

Insurers use a number of strategies to improve the profitability of their risks. The first and most well-documented strategy in the sociology of insurance is loss reduction. Through contractual devices, conditions on coverage, surveillance, and third-party enforcement of safety guidelines, insurers incentivize their policyholders to act predictably in ways that reduce the frequency and severity of losses.⁴

The second strategy insurers can use to raise revenue vis-à-vis loss costs is to increase the price of insurance. Raising insurance rates, however, was not generally the strategy of choice pursued by insurers. Historically, regulators and insurers were concerned about the incentives of insurers to lower rates, not raise them.⁵ Lowering rates enables insurers to compete based on price, which can lead to greater market share; however, rates that are too low jeopardize insurer solvency. Following contemporary catastrophes, however, insurers have argued for – and in many cases have been granted – large rate increases.⁶

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- 4 Carol A. Heimer, *Reactive Risk and Rational Action: Managing Moral Hazard in Insurance Contracts* (University of California Press, 1985); Richard Victor Ericson, Aaron Doyle, and Dean Barry, *Insurance as Governance* (University of Toronto Press, 2003); Richard Victor Ericson and Aaron Doyle, *Uncertain Business: Risk, Insurance and the Limits of Knowledge* (University of Toronto Press, 2004).
 - 5 Paul L. Joskow, "Cartels, Competition and Regulation in the Property-Liability Insurance Industry," *The Bell Journal of Economics and Management Science* 4, no. 2 (1973): 375–427.
 - 6 Dwight M. Jaffee and Thomas Russell, "Catastrophe Insurance, Capital Markets, and Uninsurable Risks," *The Journal of Risk and Insurance* 64, no. 2 (1997): 205–230.

The third strategy insurers can use to raise revenue vis-à-vis loss costs is to increase the insurance values of property, persons, and events insured – but only up to a point. In the case of home and fire insurance, that point is expressed as a relationship between the amount of insurance on a particular property and the underlying value of the property – whether that underlying value is conceptualized as market value, replacement value, or some other standard. This relationship is a ratio called “insurance-to-value.”⁷ There are three general insurance-to-value conditions: underinsurance, overinsurance, and approximately 100 percent insurance-to-value.

Underinsurance describes the condition in which the amount of insurance carried on the property, the insurance value, is less than value of the property after loss. For insurers, full insurance to value has been recognized as “essential to ensure adequate premium income to meet expected losses.”⁸ This is because insurance rates have historically been based on the assumption that the face value of the policy is approximately equal to the value of a total loss.⁹ Given that rates have been based on this assumption, when the insurance amounts on properties are too low relative to their actual value at the time of loss, average losses are higher than insurers expect. Take two homes which are both insured for \$200,000 and both pay identical premium based on that coverage amount. Home A has an actual reconstruction value of \$200,000, so it is

7 Investigatory Hearing on Replacement Cost Calculation Methodology, Before the Insurance Commissioner of the State of California, California Department of Insurance (1997) (statement of John Burns, General Underwriting Superintendent at State Farm Fire and Casualty Company).

8 “Insurance To Value,” *The Eastern Underwriter*, November 21, 1952: 24.

9 *Ibid.*; Gwendolyn Anderson, *Insurance to Value*, 4th ed. (Casualty Actuarial Society, 2006), www.casact.org/library/studynotes/anderson5.pdf.

fully insured-to-value. Home B has an actual reconstruction value of \$400,000, so it is only 50 percent insured-to-value. The average losses sustained by the owners of Home B will be larger than Home A, due to the potentially higher component costs of higher-quality (or larger, or better located) Home B. For example, a kitchen fire will probably be more costly to fix in Home B than in Home A. Yet, the premium assessed for Home B does not correspond to the actual risk borne by the insurer for Home B. Thus, unexpectedly high partial losses could consume the entire premium or more.¹⁰ Overall, when insurers assume that the policies they underwrite insure homes to full value, but when in actuality these policies underinsure homes, insurer loss ratios are pushed higher than they would be under conditions where properties are fully insured to value.¹¹ For policyholders, underinsurance is problematic since the amount of compensation available to them when they sustain a large or total loss is reduced.

Overinsurance is the condition in which the amount of insurance exceeds the total value of the property after total loss. Insurers arguably find this situation problematic inasmuch as they face the potential for their policyholders to act with the intention of profiting from loss.¹² For example, policyholders – in a situation of overinsurance – may be incentivized to burn their houses down in order to collect insurance payouts that exceed the value of their homes. For honest policyholders, overinsurance is an

10 Heimer, *Reactive Risk and Rational Action*.

11 J. Albert Burgoyne, “What’s Happening to Dwellings” (lecture, Joint Session of the National Association of Mutual Insurance Companies and the Federation of Mutual Fire Insurance Companies, 1958); “‘What’s Happening to Dwellings’ (lecture of J. Albert Burgoyne),” *The Weekly Underwriter*, November 1, 1958.

12 Heimer, *Reactive Risk and Rational Action*.

undesirable condition as well: they pay for extraneous insurance protection they could not collect after loss, when their property is valued by their insurer and found to be less than their limit.¹³

The third condition, having approximately 100 percent insurance-to-value, is the condition in which the valuation of the property is approximately equal to the amount of insurance available to policyholders under the policy for a total loss. For insurers, 100 percent insurance-to-value means that insurers collect an amount of premium that is commensurate with the risk and they do not expose themselves to undue moral hazard – assuming that rates assume that the face value of the policy equals the full value of the home. For policyholders, 100 percent insurance to value is – at least in theory – the ideal amount of insurance: policyholders are neither under-compensated for losses nor charged for benefits they cannot use.

Current industry studies of the amount and frequency of home underinsurance in the United States, conducted by a popular supplier of construction cost estimation software, reveal that underinsurance is widespread. In a 2012 survey, Marshall & Swift/Boeckh estimated that 61 percent of homeowners are underinsured, with the average amount of their insurance covering only 82 percent of the costs to rebuild.¹⁴ In public hearings and

13 This does not apply to individuals with “valued” policies. Individuals with valued policies are entitled under their contracts to be paid the face value of their policy in the event of a total loss. This coverage is not common in current home and fire insurance policies. It was introduced in the early fire insurance market in the United States through state legislation that aimed to undo the “three-quarters” rule in fire insurance policies, which compensated policyholders only to “three-quarters” of the face value of their policies in a total loss – an effort by insurers to control policyholder opportunism. Ibid.

14 Marshall & Swift/Boeckh, “Marshall & Swift/Boeckh Insurance to Value Index for Residential Properties Continues to Improve,” news release, June 21, 2012,

congressional testimonies following disaster, homeowners who have lost homes have aired their deep dissatisfaction with having too little insurance compensation to rebuild.¹⁵ Underinsurance has been called a “common” situation for homeowners, by insurance regulators.¹⁶ Both insurance consumer advocacy organizations¹⁷ and insurance industry organizations¹⁸ have contended that underinsurance is widespread and problematic for individuals who have the grave misfortune of sustaining total disaster loss. What might explain underinsurance as a widespread condition of the home insurance marketplace in the United States?

<http://www.prnewswire.com/news-releases/marshall--swiftboeckh-insurance-to-value-index-for-residential-properties-continues-to-improve-159850025.html>.

- 15 Oakland Hills Firestorm: Insurance Issues, California Senate Committee on Insurance, Claims and Corporations (1993); Investigatory Hearing on Underinsurance and the Determination of Home Replacement Costs, California Department of Insurance (2004); Up in Smoke: Can More Be Done to Help Fire Survivors Settle Their Claims?, California Senate Committee on Insurance (2004); Marc Lifsher, “A Year Later, Fire Victims Say Carriers Misled Them,” Los Angeles Times, October 23, 2008, <http://articles.latimes.com/2008/oct/23/business/fi-underinsure23>.
- 16 Marc Lifsher, “Wildfires Heat up Debate on Rising Rebuilding Costs; Are Policies Adequate to Help Make Homeowners Whole,” Los Angeles Times, June 6, 2008.
- 17 United Policyholders, Underinsurance--Request for Depublication Re: Everett v. State Farm (2008) 162 Cal. App. 4th 649. <http://www.uphelp.org/sites/default/files/Everett%20v.%20StateFarm%20Brief.pdf>.
- 18 As Insurance Information Institute (III) spokesman and chief economist Robert P. Hartwig remarked, “the underinsurance problem lies just beneath the surface all across the country,” that “the problem is everywhere,” and that “disasters simply expose it.” Joseph B. Treaster, “Homeowners Come up Short on Insurance,” The New York Times, August 31, 2004. Yet Candysse Miller, spokeswoman for the Insurance Information Network of California (IINC), a California-specific organization that operates under the umbrella of III, apparently denies that the problem is widespread, saying that the issue of underinsurance generated “a lot of headlines” but that it was not a “sweeping problem” after California’s wildfires of 2003. Kathy Chu and Elizabeth Weise, “Wildfires Spotlight Insurance Coverage Issues,” USA Today, November 2, 2007.

UNDERINSURANCE: A CHOICE OR NEGLIGENCE?

Insurance and behavioral economists have tended to place blame for inadequate insurance, in situations where insurance for particular perils is available, squarely on the shoulders of home insurance policyholders. Canonical experiments in insurance economics have led insurance economists and behavioral economists to conclude that individuals tend not to incur costs associated with mitigating against low-probability, high-consequence events.¹⁹ As such, insurance economists have attributed the problem of inadequate insurance coverage to the choices of insurance consumers and to the financial constraints that inhibit households from diverting scarce resources toward loss mitigation.²⁰ This framework has been used to explain low uptake of optional insurance coverages, even among people who live in hazard-prone areas.²¹

Departing from previous approaches that treated insurance purchasing behavior as a rational cost-benefit calculation through which consumers compare premium cost to the expected value of insurance benefits, contemporary economic approaches to the study

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- 19 Paul Slovic et al., “Preference for Insuring Against Probable Small Losses: Insurance Implications,” *The Journal of Risk and Insurance* 44, no. 2 (1977): 237–258; Gary H. McClelland, William D. Schulze, and Don L. Coursey, “Insurance for Low-probability Hazards: A Bimodal Response to Unlikely Events,” *Journal of Risk and Uncertainty* 7, no. 1 (1993): 95–116; Howard Kunreuther, “Disaster Mitigation and Insurance: Learning from Katrina,” *The ANNALS of the American Academy of Political and Social Science* 604, no. 1 (2006): 208–227.
 - 20 Howard Kunreuther and Erwann Michel-Kerjan, *At War with the Weather: Managing Large-scale Risks in a New Era of Catastrophes* (MIT Press, 2009).
 - 21 Carolyn Kousky, “Understanding the Demand for Flood Insurance,” *Natural Hazards Review* 12, no. 2 (2010): 96–110; Risa Palm and Michael E. Hodgson, *After a California Earthquake: Attitude and Behavior Change* (University of Chicago Press, 1992); Howard Kunreuther, “Causes of Underinsurance Against Natural Disasters,” *Geneva Papers on Risk & Insurance* 9, no. 2 (1984): 206.

of inadequate insurance have stressed the emotional and experience-driven nature of insurance demand. Motivation to purchase insurance is enhanced when individuals have experienced a natural hazard²² and when the likelihood and severity of loss is perceived as ambiguous rather than precisely calculable.²³

Thus, the failure of individuals to obtain insurance coverage for natural disaster loss – so long as coverage for particular perils and regions is available – has been seen as a problem of consumer choice. In this framework, due to cognitive biases, emotions, and economic constraints, people choose not to adequately insure themselves against low-probability, high consequence events.

Insurance industry spokespeople also adopt a view of inadequate insurance that hinges on consumer behavior. First, industry groups argue that homeowners have an economic incentive to underestimate replacement costs because they can save premium – a decision that has no negative consequences for most homeowners since the probability of sustaining a total loss is so low.²⁴ Second, industry groups argue that

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- 22 Howard Kunreuther and Mark V. Pauly, *Insurance Decision-making and Market Behavior* (Now Publishers Inc, 2006); Risa Palm, “Demand for Disaster Insurance: Residential Coverage,” in *Paying the Price: The Status and Role of Insurance Against Natural Disasters in the United States*, ed. by Howard Kunreuther and Richard J. Roth (Joseph Henry Press, 1998).
- 23 Christian Schade, Howard Kunreuther, and Philipp Koellinger, “Protecting Against Low-Probability Disasters: The Role of Worry,” *Journal of Behavioral Decision Making*, 2011.
- 24 REG-2010-00001 Proposed Regulations on Standards and Training for Estimating Replacement Value on Homeowners Insurance, California Department of Insurance (written comments of Stephen L. Young, Senior Vice President and General Counsel of Insurance Brokers and Agents of the West (IBA West), May 17, 2010). Also, the assistant vice president of Xactware, a construction cost estimation software company, has argued that “some policyholders have reduced their insurance coverage to cope with the economic recession.” Mike Fulton, “Mitigating

homeowners – being proximate to their properties – can modify their properties and increase property values, without disclosing the changes to their insurers.²⁵ Third, even if no changes have been made to the property, industry groups contend that policyholders are responsible for selecting their coverage limits.²⁶ In this view, underinsurance is the outcome of policyholder action and inaction: action inasmuch as policyholders have made property improvements but choose not to report those improvements to their insurers, and inaction inasmuch as they fail to keep policies “updated.”²⁷ The arguments insurance industry make about policyholder responsibility have some elements of truth, since they point out ways in which their risks are

Probabilistic Risks in Property Insurance,” *Claims Magazine*, May 24, 2010, <http://www.propertycasualty360.com/2010/05/24/mitigating-probabilistic-risks-in-property-insurance->. Yet, the Insurance Research Council concluded, based on a study of insurance purchasing behavior, that such action may be relatively rare: “among those with auto or homeowners insurance, 15 percent said they had increased their insurance deductibles or reduced the amount of coverage in order to reduce premium costs.” Insurance Research Council, “In Response to Economic Downturn Most Consumers Maintain Essential Insurance Coverages,” news release, April 28, 2009.

- 25 A video on the IINC website advises people to contact their agent regularly to make sure that they are adequately insured, that it is the homeowner's responsibility to ensure that he/she has enough coverage, and that underinsurance stems from either 1) people making improvements that they don't declare; 2) or "they live where construction costs are very high." Insurance Information Network of California (IINC), “Preventing Underinsurance,” <http://www.iinc.org/categories/video>, Last accessed: January 31, 2010.
- 26 REG-2010-00001 Proposed Regulations on Standards and Training for Estimating Replacement Value on Homeowners Insurance, California Department of Insurance (written statement of the Association of California Insurance Companies (ACIC), May 17, 2010). “Lessons from the Wildfires: What California Members Want Every Homeowner to Know,” *USAA Magazine*, Winter 2004.
- 27 Matt Brady, “California Underinsured Homes Not Insurers’ Fault, Says Hartwig,” *Property Casualty 360*, November 15, 2007.

potentially subject to the effects of policyholder opportunism. Yet, insurance industry explanations, and to some extent the explanations on offer by insurance economists for underinsurance, connote the presumption, which is incorrect, that adequate replacement cost insurance is readily available to homeowners for the picking, through adoption of best consumer practices.

As the history presented in the next sections will show, insurance companies have long recognized that home insurance policies often do not entitle individuals to enough compensation in the aftermath of total loss. Attempts on the part of the insurance industry to solve the underinsurance problem have repeatedly failed to provide a sustainable solution. Current widespread underinsurance condition should be viewed – based on empirical inquiry into the supply-side production of insurance in historical context – as a persistent, systemic condition of the home insurance market in the United States. Due to the limits of valuation technologies to capture the complexity and uncertainty driving future home replacement values in post-disaster conditions, underinsurance will be difficult – if not impossible – for insurers to surmount.

THE ERA OF SALESMANSHIP

Prior to the 1950s, fire policies covering dwellings offered compensation to policyholders only on the basis of the depreciated value of a loss – also known as the “actual cash value” of a loss. There were generally two methods of establishing a property's actual cash value after loss. One method was to define the actual cash value of the property as the market value of the property just before the loss – as if it were

sold on the private market. Another method was to calculate a depreciated replacement value, whereby the insurer calculated the cost to replace the building and deducted an amount from that figure to reflect the depreciated condition of building components. The logic for settling policyholder losses only on the basis of actual cash value was that to provide any more compensation would violate the principle of indemnity, which holds that policyholders should not be made better off by their insurance claim than they were before loss. To violate this principle was thought, for much of insurance history, to invite policyholder opportunism.²⁸

Whether an insurer or adjuster defined actual cash value as market value or depreciated replacement value, dwelling fire insurance policyholders prior to the 1950s who were fully insured-to-value and who sustained a total loss were in neither case entitled to receive compensation that would allow them to replace their destroyed home with a similar new one – whether bought or rebuilt. Since the land was not insured (and still is not insured under current policies), policyholders were not entitled under their policies to an amount of compensation that alone, in the aftermath of loss, would be sufficient to purchase similar houses on similar plots of land. And policyholders who sought to rebuild had access only to the depreciated value of their old homes. So, for policyholders recovering from a total loss, the difference between having full insurance-to-value and having underinsurance under an actual cash value policy meant having more or less compensation to work with to rebuild, buy a new home, or rent – a difference that could be significant.

28 Heimer, *Reactive Risk and Rational Action*.

In the ten years following the Depression, insurance executives and professionals considered underinsurance to be a common problem affecting American property owners. It was blamed on rapid increases in construction costs.²⁹ A 1936 survey hailed as “the first consumer analysis of [i]nsurance buying habits among home-owners” revealed that while 96 percent of surveyed homeowners had some kind of policy in place, only 42 percent had full insurance-to-value.³⁰

The solution to this problem, many in the industry argued, was to improve insurance salesmanship. Commentators in the period characterized underinsurance as a problem caused by inflation, which harmed insurers, policyholders, and the reputation of the property insurance industry as a whole. Insurance industry groups charged insurance agents with the moral responsibility of rectifying the problem, and made overtures to support agent sales efforts to do so.

To help raise insurance-to-value, some insurers supplied agents with selling aids. A form letter provided by Illinois Fire Insurance Company is particularly illuminating:

...Too few homes are insured against fire. Too many are inadequately insured. Too often, the fire insurance was put off “till tomorrow.” “Too little insurance,” is often the answer that is found when the loss occurs. Is your property insured – adequately? Your answer is probably, “I believe it is.” My reply is, “Let's play it safe – let's be sure – TODAY.” Today, it is as easy as telephoning me, to be safe and to be sure that your fire insurance is adequate. Call me, please. Very sincerely,³¹

In the years following the passage of the 1945 McCarran-Ferguson Act, which had led

29 Frank V. Smith, *Fire Insurance Sales Manual and Guide to the Tariff Rules and Tariff Rates* (San Francisco: Underwriter's Report, 1934).

30 The American Group, news release, June 3, 1936.

31 Illinois Fire Insurance Company, *Here's Your Copy of Our New Sales Letter Portfolio* (1943).

to the implementation of more stringent insurance rate regulations in many states, the problem of inadequate insurance-to-value appeared to draw increased attention within the industry. By 1946, an estimated 3 out of 4 homes and businesses were underinsured – a situation exacerbated during the war years due to additional increases in wage rates and materials costs.³²

The National Board of Fire Underwriters, the once-premier fire insurance rate-making organization for the fire insurance industry (now the American Insurance Association), grew concerned about underinsurance.³³ The Board, which was charged with the responsibility of taking measures to protect the common interest and general prosperity of the insurance industry,³⁴ articulated the dangers of underinsurance: “should fire strike property owners while they are under-insured, they face tragic and needless losses – losses that might well represent the savings accumulated by years of effort.”³⁵ Besides the consequences of foregone premium revenue, the Board considered underinsurance to be a potentially explosive public relations problem: faced with inadequately compensated losses, policyholders could become “an enemy of the business” – a problem that could make it difficult for the insurance industry to grow and prosper.³⁶

32 George G. Traver, “National Board’s Program to ‘Lick’ the Under-Insurance Problem,” *The Local Agent*, March 1946; “Under-Insurance Vital Matter That Local Agents Fail to Stress,” *The Weekly Underwriter*, February 16, 1946.

33 Proceedings of the Eightieth Annual Meeting of the National Board of Fire Underwriters (1946).

34 Proceedings of the National Board of Fire Underwriters (1866).

35 Traver, “National Board’s Program to ‘Lick’ the Under-Insurance Problem.”

36 *Ibid.* A similar argument made in a contemporaneous article put it this way: “If the

To address underinsurance, the Board launched an intensive 5-month campaign during the mid-Forties that aimed, “for the first time, to concentrate in a unified program the full resources of the business in an effort to correct this situation.”³⁷ The program was intended to provide a host of sales materials – including posters, fliers, stickers, and speech material – that agents could use in their efforts to “increase residential coverages in line with current values.”³⁸ The year it was launched, nearly 2,500 agents ordered promotional materials directly from the Board.³⁹

Industry publications emphasized the role of insurance agents in remedying the underinsurance problem, suggesting that since a policyholder is not able to correctly interpret all the features of his policy; he must depend on his insurance advisor to perform that function.⁴⁰ Without the agent's efforts to bring client attention to underinsurance, the homeowner “will probably continue in ignorance of his critical danger of suffering a severe financial set-back in event of a loss.”⁴¹ Agents were advised

fire insurance company is to continue in operation as a private enterprise, if the agent is to maintain his dearly earned position in the community, the insuring public must be satisfied that the job to be done has been well done.” F.P.O. Potter, “Insurance to Value,” *Casualty and Surety Journal*, November 1948.

- 37 Traver, “National Board’s Program to ‘Lick’ the Under-Insurance Problem”; “Under-Insurance Vital Matter That Local Agents Fail to Stress.”
- 38 Traver, “National Board’s Program to ‘Lick’ the Under-Insurance Problem”; “Under-Insurance Vital Matter That Local Agents Fail to Stress.”
- 39 Proceedings of the Eightieth Annual Meeting of the National Board of Fire Underwriters.
- 40 Bennett Moore, *How to Protect Your Home and Savings: Seventy-nine Ways for Home Owners to Avoid Money Losses* (Liberty Mutual Insurance Company, 1941).
- 41 “Dwelling Business Needs Overhauling,” *Rough Notes*, May 1944. The article reports that agents who checked into replacement costs had found insurance values to be inadequate, even among their own clients. It included comments from

to “check the values and recommend more insurance where needed. It is a source of additional revenue: a duty to your customer.”⁴² Agents were encouraged to proactively resolve underinsurance:

[The] agent should review all term contracts now and periodically thereafter; he should personally contact every client; he should insist on a statement of sound insurable property values, and he should assist his clients in creating a system to maintain those insurable values continuously current.⁴³

Proper agent service was described, at the time, as a matter of ensuring that properties were appraised by competent professionals.⁴⁴

The coordinated campaign to support insurance salesmanship initiated by the National Board of Fire Underwriters to improve insurance to value garnered encouraging initial results – at least in the eyes of A.M. Best Company founder Alfred M. Best. In a 1948 address to the Risk Research Institute at the College of Insurance, Best spoke about the Board's campaign: “from that time until this people have been buying more insurance on the same properties, and this bulge in the volume of premiums cannot, of course, be charged to increased rates.”⁴⁵ Tacitly referring to the “All Industry” model rating laws that took effect in states throughout the late 1940s, which had restricted rate (i.e. price) increases for insurers, Best was likely suggesting

successful agents who described how easy they found it to increase the insurable values of their clients' homes simply by making them aware of the problem in the right way.

42 American Insurance Group (AIG), 50 Wartime Aids for Insurance Agents (1943).

43 Potter, “Insurance to Value.”

44 Smith, Fire Insurance Sales Manual and Guide to the Tariff Rules and Tariff Rates.

45 Alfred M. Best, “Loss Trends and Their Effect Upon Insurance Costs” (lecture, Risk Research Institute, New York, NY, January 22, 1948).

that the increased premium revenue over the previous years was due to increases in insurable values.

Yet, efforts that agents may have taken to increase insurable values was apparently not enough to fully resolve inadequate insurance to value; underinsurance was again mentioned by the year's end in professional literature geared toward individuals in the industry as a serious problem caused by the increased cost of materials and labor.⁴⁶ An estimated two out of every three losses involved “a great gap between the amount of insurance and the insurable value”:

Loss after loss bears the statement that the policy amount was exhausted before full restitution could be made. In far too many cases corporations, lawyers, doctors, clerks or mechanics own dwellings, farms, churches, factories and stores that are not insured to full value.⁴⁷

Underinsurance was so widespread that in an article about a state insurance commissioner's warning about the hazards of overinsurance, *The National Underwriter* qualified the Commissioner's statement with an unambiguous caveat: while overinsurance had been problematic immediately after the Depression, “[i]n recent years the race has been on to increase insurance to value.”⁴⁸

Insurers strived to keep up with tremendous rates of new home construction in the 1950s and the increasing numbers of individuals who became homeowners through the GI Bill – developments that vastly increased the opportunity for insurance sales. In the early 1950s, just as had been the case in years prior, persistent underinsurance was

46 Potter, “Insurance to Value.”

47 Ibid.

48 “Miss. Commissioner Gives Warning on Overinsurance,” *The National Underwriter*, January 27, 1949.

attributed to inflation.⁴⁹ Just as post WWII cost increases had been blamed for cost increases without increases in insured values, so too was the Korean “incident.”⁵⁰

Underinsurance was described by some as nothing less than an “evil that crept up on homeowners due to inflation.”⁵¹

The National Board of Fire Underwriters, in 1951, declared a second attempt to help insurance agents resolve underinsurance and its consequences for agents, insureds, and carriers:

The situation has become of such a great concern to the industry that the National Board of Fire Underwriters is now making available to agents and brokers, without charge, an animated television spot announcement dramatizing the dangers of underinsurance.⁵²

Again, the Board presented underinsurance not only as a problem of premium revenue, of inadequately covered policyholders, and of inadequately compensated agents due to foregone commissions, but also as a public relations problem that could be detrimental to the industry as a whole.⁵³ The solution was better salesmanship.

49 “Underinsurance Is A Problem The Producer Must Solve,” *The Insurance Field*, 1951.

50 “Underinsurance Trend Is Accented by Sampling,” *National Underwriter*, September 11, 1952. The article consists of printed excerpts of letters the president of a fire insurance company sent to the insurance commissioner of his state. The word, “incident,” is the author's choice. I assume the author is referring to the Korean War.

51 Norman Lobsenz and Amelia Lobsenz, “How Much Fire Insurance Could You Collect? Are You Sure You’re Insured?,” *Today’s Woman*, June 1950.

52 “Underinsurance Is A Problem The Producer Must Solve.”

53 John D. Roane, “Appraisals and Under Insurance” (lecture, Meeting of Maryland Insurance Agents, Ocean City, MD, 1952); “Adjuster Dramatizes Underinsurance Problem,” *National Underwriter*, July 3, 1952.

ENTER REPLACEMENT COST COVERAGE

In the early 1950s, new fire and new multi-peril package policies came to market which, in contrast with previously available dwelling policies that settled losses on the basis of actual cash value, began to offer compensation for losses on the basis of the replacement cost of the destroyed dwelling.⁵⁴ The purpose behind the introduction of replacement cost policies was to entitle a homeowner to the means of replacing his or her home in case of destruction by a covered peril, without incurring out-of-pocket costs beyond stated deductibles or coinsurance.⁵⁵

54 M. Stuart Goldin, “An Insurance Policy Providing for Replacement of Fire Damaged Structures with New Materials,” *University of Pennsylvania Law Review* 96, no. 6 (1948): 841–853; John Eugene Pierce, *Development of Comprehensive Insurance for the Household* (Homewood, IL: R.D. Irwin / S. S. Huebner Foundation for Insurance Education, 1958). Replacement cost benefits were introduced in the mid-1940s, except some jurisdictions limited the coverage to industrial and government risks. Replacement cost coverage first became available in the dwelling risk market on April 14, 1954, when the “Dwelling Building(s) and Contents – Broad Form,” was introduced by the Inter-Regional Insurance Conference. It could be attached to a fire insurance policy covering private dwelling property. Full replacement would be paid conditioned on either a) the loss being less than \$1,000 and also less than 5% of the total insurance on the building applicable to the loss-causing peril; or b) The total amount of insurance is equal to at least 80% of the replacement cost of the building. Else, in the event that insurance is less than 80% to value, the insured is paid for partial losses proportionate to the insurance carried. In June of 1954, it became available under a similar coverage called “Dwelling Building(s) Special Form,” which also extended fire policies. Within a few years, replacement cost coverage was made available as an extension to the multiperil Homeowners Policy program – a program that had begun in 1950.

55 The added cost of code upgrades is, however, a category of expense for which many replacement cost home insurance policies provide limited or no coverage.

Replacement cost or replacement cost value is the money amount that it will take to reproduce a structure just as it was before any loss. This means to rebuild the structure from the ground up in its entirety.....If the structure is a building that has high ceilings, tall doors, curved windows with bent glass and marble fixtures in the bathrooms, that may or may not be capable of being replaced, the replacement cost or value of the structure is what it would cost to rebuild, as is, with high ceilings, tall doors, curved windows with bent glass and marble fixtures in the bathrooms, that may or may not be capable of being replaced. Whether it can be duplicated or not should have no bearing on replacement value.⁵⁶

Replacement cost benefits were made available to homeowners in fire insurance policies through the Dwelling Building(s) and Contents – Broad Form and the Dwelling Building(s) and Contents – Special Form of 1954; both included an extension to the cost of repair or replacement without deduction for depreciation.⁵⁷

The early 1950s also saw the widespread launch of the multi-peril homeowners policy package to the mass market, which bundled coverages that were previously sold separately – such as liability, theft, and property coverage – into a single policy.⁵⁸ Two Homeowners policies were initially developed by the Multiple Peril Insurance Rating

56 Norman D. Newell, *Replacement Cost Insurance* (Underwriter's Report of California, 1977).

57 Pierce, *Development of Comprehensive Insurance for the Household*.

58 *Ibid.* While the first policy providing coverage to more than one of the key areas of a dwelling owner's insurance needs (the Combination Residence Policy) was first introduced in 1913 by a casualty company, the coverages bundled into one policy did not include coverage for direct physical damage caused by fire. Fire insurers, for their part, showed greater interest in underwriting additional perils around World War I. The Extended Coverage endorsement of 1938, and then later the Extended Coverage endorsement introduced for use with the Dwelling form of the New York Standard fire insurance policy, made it commonplace for the fire insurance policy to be a means of providing multiple-hazard insurance. After widespread approval of multiple-line underwriting powers, since it had heretofore been prohibited, numerous policies and endorsements that provided fire and casualty coverages bundled together were offered as a single product in the marketplace.

Organization in 1952: a basic policy known as Homeowners Policy A and a standard policy known as Homeowners Policy B.⁵⁹ Within the span of a few years, a more comprehensive policy, Homeowners Policy C, was made available for eligible homeowners. The Homeowners Policy B, The Homeowners Policy C, the Dwelling Fire Broad policy, and the Dwelling Fire Special policy, all included replacement cost coverage on the dwelling.⁶⁰ Replacement cost benefits permitted individuals to collect “the full cost of repair or replacement (without deduction for depreciation),” on an as-incurred basis after loss.⁶¹ Loss settlement on the basis of replacement cost could only be collected provided that the insured maintained 80 percent insurance-to-value on the dwelling, as determined at the time of the loss. This policy feature was billed as helping to promote insurance-to-value.⁶²

Dwelling replacement cost policies, which includes fire policies and the new bundled homeowners package policies, made insurance property valuation newly significant for home insurance policyholders. Certainly, dwelling owners who sustained large losses under actual cash value policies benefited from avoiding underinsurance, since they had more capital to work with in their efforts to recover from their losses. But under the new replacement cost policies, full insurance-to-value implied a promise by the insurer to cover the full costs of rebuilding their destroyed home. What was once the

59 Also in 1954, a competing insurance policy series called the Comprehensive Dwelling Policy came to market.

60 Pierce, *Development of Comprehensive Insurance for the Household*.

61 General Adjustment Bureau, *Replacement Cost Coverage – Dwelling Risks* (n.d.).

62 George L. Head, *Insurance to Value* (R.D. Irwin / S. S. Huebner Foundation for Insurance Education, 1971).

function of home insurance under actual cash value policies – providing a bigger or smaller payout following loss, depending on the insurable value – became defined under replacement cost policies as having a new function: restoring individuals to new homes and properties that were comparable in quality to the ones they lost. The difference between the two functions of home insurance is that the intended purpose of replacement cost policies contained within it the potential for failure: after a major loss, a policyholder may or may not have enough compensation available under his replacement cost policy to rebuild his home.

The development of multi-peril package policies enabled insurers to sell more insurance at lower cost due to, among other things, the fact that bundling of coverages combined administrative costs that had once been incurred separately for every peril-specific policy.⁶³ The Homeowners policies were geared toward desirable, standard risks: dwellings that were not exceptionally low-valued or high-valued, dwellings located in neighborhoods that were not subject to deterioration, and dwellings with non-obsolete construction.⁶⁴ The Homeowners policies also addressed inadequate insurance-to-value through specifying predefined coverage minimums.⁶⁵

Armed with new, innovative policies, agents (aka insurance “producers”) were deemed responsible for resolving inadequate insurance-to-value. As one press release from the National Board of Fire Underwriters stated:

63 Alfred I. Jaffe, *Personal Lines*, vol. 1 of *Insurance Producer’s Handbook* (Englewood Cliffs, NJ: Institute for Business Planning, 1978).

64 *Ibid.*

65 Head, *Insurance to Value*; Jaffe, *Personal Lines*.

[Y]our agent should be more than a salesman. It's his job to advise you on coverage, to make sure you are adequately and economically protected, to help you in case of a fire loss, to serve as a link between you and the insurance company.⁶⁶

The power that carriers could potentially exert over the underinsurance problem was thought to pale in comparison to the proactive role that agents, as advisors to their policyholders, would need to play in increasing insurable values. Insurers could help with public education, but “[i]t is the producer – and only the producer – who can bring the pathetic effects of under-insurance home to assureds” through upholding a responsibility to “make make every effort to sell adequate amounts and proper coverages...Under-insurance can be eliminated, but the producers are the boys who will have to see that it is done.”⁶⁷ Former president of the National Association of Independent Insurance Adjusters estimated, in 1952, that at least 60 percent of all dwellings were underinsured.⁶⁸

In spite of efforts to resolve underinsurance through salesmanship, making replacement cost benefits contingent on carrying at least 80 percent insurance-to-value, and coverage minimums in the new bundled policies, the underinsurance problem persisted through the late 1950s and early 1960s. “The currency and frequency of underinsured property losses have shown up as impressive aspects of the insurance business as it is functioning right now countryover.”⁶⁹ It was still blamed on inflationary

66 National Board of Fire Underwriters, news release, April 16, 1951.

67 “Underinsurance Is A Problem The Producer Must Solve.”

68 John D. Roane, “Appraisals and Under Insurance”; “Adjuster Dramatizes Underinsurance Problem.”

69 “Currency, Frequency of Underinsurance Impresses Even Veteran Loss Officials,”

trends,⁷⁰ which increased costs in an “almost unbroken inflationary spiral” that caused even adequately insured properties “to become seriously underinsured if the amount of protection was not regularly adjusted.”⁷¹ Mutual insurance carriers, in a survey reported in 1961, indicated that property values in insurance were in serious need of improvement; policies submitted to them by agents were appreciably inadequate.⁷² In the words of one insurance executive in regards to the levels of insurance at his own company:

despite continuing efforts and periodic concerted campaigns to bring amounts of insurance up to proper levels, far too large a percentage of policies carried values considerably less than the price for which even the least expensive satisfactory dwelling could be purchased.⁷³

Indeed, the negative consequences of underinsurance for homeowners who have sustained losses were publicly warranted by the industry as major reasons for resolving this widespread market condition.

In the roughly thirty year period between the mid-Thirties to the early-Sixties, the view that members of the insurance industry publicly articulated about the underinsurance problem and its potential solutions retained emphasis on the paramount

The National Underwriter, March 7, 1957.

70 John A. Steel, “Insurance Problems and Misconceptions Placed in Spotlight: Better Understanding of Services Sighted,” *Christian Science Monitor*, July 9, 1957. Author was president of Pacific National Insurance Group.

71 Burgoyne, “What’s Happening to Dwellings”; “‘What’s Happening to Dwellings’ (lecture of J. Albert Burgoyne).” Burgoyne was Assistant Vice President of Liberty Mutual Insurance Company.

72 “Fire Companies Progressing in Requiring Insurance to Value,” *Insurance Advocate*, April 1, 1961: 14–16.

73 Burgoyne, “What’s Happening to Dwellings.”

importance of agent sales practices. Underinsurance was framed within the insurance industry as an inflationary problem that agents could solve through salesmanship. Dwelling valuations that were based on particular prices of labor and supplies in the market for building materials and supplies were becoming outdated. Agents were expected to educate the consumer about the inadequacy of his or her insurance and to be an effective enough advocate for the policyholder's interests to convince him or her to buy more. The moral responsibility for underinsurance, among industry commentators, was situated squarely on the shoulders of insurance sales agents.

THE ERA OF AUTOMATIC VALUATION

Throughout the late 1960s and 1970s, underinsurance continued to be publicly recognized within the industry as a major issue in the dwelling insurance market that had been unresolved by previous efforts within the industry to address it. Insurance executives from both Hartford and State Farm indicated in the late 1960s that well over half of the homes on their books, as revealed by in-house surveys, were inadequately insured.⁷⁴ The statistics for both the frequency and magnitude of underinsurance across the market were grim: according to one study sponsored by St. Paul Insurance Companies, 55 percent of homes in the nation were insured to less than 80 percent of replacement cost while the average insurance carried on homes below the 80 percent

74 W.S. Clevenger, "A First: The Hartford's Inflation Guard Endorsement," *The Hartford Agent*, April 1968; Joseph M. Zangerle, "Inflationary Pressures on Homeowners Insurance" (lecture, Annual Workshop of the National Association of Independent Insurers, 1969). Joseph M. Zangerle was executive assistant of State Farm Fire and Casualty Co.

insurance-to-value threshold was 54.2 percent insurance-to-value.⁷⁵

Insurers, as they had in previous decades, sought to overcome the underinsurance problem. But how industry commentators conceived of the solution began to change in the late 1960s: the solution to the problem of insurance would require technological advances in how property is valued and how property valuations are updated – not just sales strategy. With the widespread diffusion of replacement cost benefits, which had the purported function of enabling policyholders to rebuild their dwellings in the aftermath of loss, insurers introduced more complexity in their valuation problem: the intended function of replacement cost policies was to replace homes after loss, which raised the stakes for generating precise home replacement cost valuations. The period from the 1960s through the 1990s was characterized by efforts by insurers to leverage automatic procedures and algorithms to cost-effectively improve valuation accuracy. Unfortunately, just like sales strategies, algorithms would eventually prove to be an insufficient solution to the problem of underinsurance.

Automatic Increases in Policy Limits

In the late 1960s, inflation was blamed as a major contributing factor to the underinsurance problem – just as it had been blamed in previous decades. In the words of one advertisement by Hartford insurance, “with what lies ahead for both the economy and the building industry, it would seem that costs have only one way to go – up. Inflation has become a way of life. Yet, with each new round of increases, your

75 St. Paul Insurance Companies, *A Survey of Homeowners on Insurance to Value* (1965).

customers' problem – a lack of sufficient insurance – becomes worse.”⁷⁶ W.S. Clevenger, Superintendent of the Property and Package Department of Hartford, contended that while underinsurance had been a longtime problem in the industry, it worsened in the 1970s⁷⁷– due to high rates of inflation during that period.

To address underinsurance due to inflation, insurers continued to rely on agents to educate policyholders: one technique involved having insurance company representatives, “at the time of renewal of a homeowners policy, make a special effort to explain construction cost and statistical trends that most persons are not aware of.”⁷⁸ As before, insurers continued to support agents by providing educational literature for agent use “which tells in layman's terms how, because of inflation, replacement costs can easily outrun insurance coverage.”⁷⁹

Yet, it was becoming apparent that agent salesmanship was not enough to keep valuations current with national construction costs. So in tandem with continued emphasis on sales strategies, insurers pursued new methods for resolving underinsurance through automatic methods of increasing policy limits. Among these methods was the strategy of automatically increasing policy limits at renewal, whereby policyholders could choose to accept or reject the generated increases. A second method was the “inflation guard” endorsement that was developed by Hartford and filed by the

76 Clevenger, “A First: The Hartford’s Inflation Guard Endorsement.”

77 Peter Mustard, “Insurance to Value Resistance? Offer to Buy the Client’s Home for the Amount of His Coverage,” *Canadian Underwriter*, August 1974.

78 “Is Your Home Underinsured?,” *Journal of American Insurance*, June 1970.

79 *Ibid.*

Multi-Line Insurance Rating Bureau on behalf of member companies, which increased policy limits by a set percentage at regular intervals. The “inflation guard” endorsement was an exceptionally popular policy innovation; it was available in most states by 1970.⁸⁰ A third method was automatically altering policy limits to reflect changes in the construction cost index.⁸¹ The valuation figures generated through these methods of policy updating were the basis of the new premium and Coverage A amounts for the next year.⁸² Automatic methods of increasing limits were touted to agents as saving the time and energy associated with manually and periodically updating policy limits by endorsement.⁸³ Other strategies adopted by insurers included conducting annual reviews of coverage limits and regularly furnishing agents with cost guides produced by firms specializing in property evaluation.⁸⁴

While exceptionally popular, automatic methods of updating dwelling insurance coverage amounts were limited in their ability to address inadequate insurance-to-value. One reason was that automatic methods, while they could address the outdating of prices used as the basis of valuations, the algorithmic rules for increases did not

80 Ibid.

81 Zangerle, “Inflationary Pressures on Homeowners Insurance”; Diane Richardson, *Insuring to Value* (National Underwriter Company / Marshall & Swift, 1996). It is important to note that, like inflation guard endorsements, this method was also a blunt instrument. Increasing limits through “indexing” involved the insurer, at renewal or a specified interval, multiplying current coverage limits by a multiplier consisting of the “average change in residential construction, weighted for an area of the country (typically at the three-digit ZIP code level)” – according to Richardson.

82 Richardson, *Insuring to Value*.

83 Clevenger, “A First: The Hartford’s Inflation Guard Endorsement.”

84 Mustard, “Insurance to Value Resistance? Offer to Buy the Client’s Home for the Amount of His Coverage.”

necessarily reflect actual complex changes in the market. First, predefined fixed percentage policy limit increases that were common to inflation guard endorsements did not necessarily track actual increases in replacement costs.⁸⁵ Second, regional variation in replacement costs were not addressed because the cost data sources insurers used to increase limits through specified percentages and construction cost indexes were often national in scope due to the convenience of national data (i.e. the Composite Construction Cost Index) and the high administrative costs of tracking regional data.⁸⁶ Third, aggregate changes captured in indexes did not provide good information about the costs to replace “a particular insured's property at the time and location of the loss”; as such, they could only helpfully supplement “more individualized approaches to maintaining limits.”⁸⁷

Another identified limitation of automatic approaches to policy updating concerned the idea that policyholder carelessness and ignorance may be contributing factors to underinsurance – an increasingly prevalent idea aired by industry commentators.⁸⁸

85 “Impact of Rising Costs: Take a Fresh Look at Your Home Insurance,” U.S. News & World Report, March 15, 1978.

86 Zangerle, “Inflationary Pressures on Homeowners Insurance.”

87 Eric A. Wiening and Donald S. Malecki, *Insurance Contract Analysis* (American Institute for Chartered Property Casualty Underwriters (AICPCU), 1992).

88 Ascribing responsibility for underinsurance to homeowners was not new in this period. As a case in point, consider a statement by the National Board of Fire Underwriters, which admonished property owners to take responsibility for valuation (and updates to property valuations) and recommended that owners avoid the hazards of underinsuring by determining “every few years the current replacement cost of property, including old and newly acquired furnishings” and maintaining “fire insurance coverage in line with these values.” National Board of Fire Underwriters. (undated). Yet, policyholder responsibility was not a primary emphasis in the industry literature prior to the 1970s.

According to an article appearing in the *Journal of American Insurance*, while companies might provide “rule-of-thumb methods” for helping a homeowner determine a home's current replacement value, and while the industry had a responsibility to keep policyholders aware of rising replacement costs, “the ultimate responsibility for obtaining the needed amount of insurance lies with the homeowner himself.”⁸⁹ The article also described policyholder responsibility – and the consequences that result when policyholders fail to carry out that responsibility:

[T]he reasons behind this nationwide coverage gap vary from family to family. Sometimes, a policyholder will have a \$5,000 or \$6,000 addition built onto his home and then forget to notify his insurance company of the need for additional coverage....In other cases of underinsurance, it is often a matter of indifference or lack of knowledge.⁹⁰

Essentially, these concerns highlighted the fact that home insurance valuations suffer not only from potential outdated of materials and labor prices, but also from outdated of the composition of the home itself. Insurance valuations are generated using particular prices and features of a particular home; however, both the particular prices and the particular home are subject to change.

A final limitation of automatic methods to produce adequate insurance-to-value for homeowners was their inability to address underinsurance arising from inadequate initial dwelling valuation. Industry commentators expressed the difficulty of being certain about whether a dwelling is adequately insured-to-value when the policy is first written.⁹¹ Insurers who marketed inflation guard endorsements to their agents and

89 “Is Your Home Underinsured?”

90 Ibid.

91 Zangerle, “Inflationary Pressures on Homeowners Insurance.”

policyholders recognized, even early on, that such provisions providing for regular policy limit increases to keep policies “up-to-date” could not address the problem of inadequate initial valuation.⁹² Inflation guards could “help only if coverage is adequate to begin with.”⁹³

Unresolved Difficulties of Initial Valuation

Methods for automatically increasing policy limits, such as the policy “inflation guard,” could not resolve the problem of initial valuation. A building's replacement costs are the costs of constructing another building of the same layout, design, and size – constructed with materials “of like kind and quality” – including all materials, labor costs, and contractor overhead and profit that are required to complete the structure.⁹⁴ Historically, the best-practice method of building valuation was the quantity survey.⁹⁵ The quantity survey method of building valuation was designed to consider separately all the major construction elements of a building such that they could be added together to generate a reliable replacement cost; as such, the quantity survey method required implementation by highly trained professionals with significant expertise in building construction techniques and a strong grasp of quality differences in materials and workmanship that

92 Clevenger, “A First: The Hartford’s Inflation Guard Endorsement.”

93 “Insurance to Value Means Protection for the Homeowner...and You,” *The Producer* 14, no. 2 (1984): 12–15.

94 Newell, *Replacement Cost Insurance*.

95 Myron L. Matthews, *Appraisal and Valuation Manual*, vol. 5 (American Society of Appraisers, 1960).

could affect costs pertaining to each element of a building.⁹⁶

Over time, the quantity survey gave way to the use of other appraisal methods that did not require detail collected by highly trained appraisers for home insurance valuations to be produced. These methods involved the application of evaluative algorithms that insurance professionals with less training could implement in order to efficiently generate insurable values. A popular method was to estimate the replacement cost of a structure by the square or cubic foot.⁹⁷ In one particular implementation of this method, the individual conducting the appraisal – whether agent or professional appraiser – would classify the home as being one among a set of finite ideal home types (i.e. bungalow, cottage, etc) and being among one of several levels of quality of those types (i.e. cheap, average, good, expensive). The initial assignment of type/quality produced a base replacement cost per square or cubic foot.⁹⁸ The base figures were supposed to be adjusted by a competent professional to reflect the home's actual square or cubic footage, deviations from the base type in detailed areas like finishings and wall composition, and local costs of construction. But valuations could still be produced whether or not they were adjusted by an expert. A second valuation method was similar in its assignment of base costs per unit, except that instead of the units being square or cubic feet, the “unit count method” or “room count method” assigned values to rooms –

96 Richardson, *Insuring to Value*.

97 Wiening and Malecki, *Insurance Contract Analysis*.

98 E.H. Boeckh, *Boeckh's Manual of Appraisals*, 5th ed. (Washington, DC: E.H. Boeckh & Associates, 1956).

where room values were based on construction class and on the location of the property.⁹⁹ A third method involved applying a cost multiplier to a home's initial construction costs, to bring initial values up to date.

Valuations that utilize significant amounts of detail about the dwelling require a highly skilled appraiser who is knowledgeable about the (sometimes subtle) differences in construction technique that bear upon insurable value. For example, an appraiser, to produce the most accurate valuation possible, would need to be able to identify floor support grinders or partitions, the size of joists, and the spacing of the joists on centers.¹⁰⁰ Detailed appraisals require a knowledgeable appraiser to actually visit the premises, take relevant measurements, and conduct a thorough inspection to identify the particular construction techniques and finishings used in particular dwellings.

Insurers found that detailed methods of initial dwelling valuation to be onerous. Valuing dwellings on an individualized basis was simply untenable for insurers: “[a]s a class, the business does not produce enough premium to justify inspection.”¹⁰¹ Consequently, insurers found it necessary to supply less detailed and potentially less accurate valuations for insureds using agents who were not necessarily qualified to supply valuations, using national rather than localized cost data, and using methods that did not involve inspecting the property to ensure that large alterations to the property

99 Richardson, *Insuring to Value*.

100 Boeckh, *Boeckh's Manual of Appraisals*. For a listing of some of these items, refer to the section in Boeckh called “Points to be Noted in Inspections.”

101 “Losses Give More Data on Dwelling Underinsurance,” *The National Underwriter*, October 11, 1951.

had not occurred since the insurance was first obtained.¹⁰²

Rather than provide appraisals themselves, many insurers supplied policyholders in the 1970s with do-it-yourself home appraisal kits – billed as enabling “a policyholder to determine the replacement cost of his home in a matter of minutes” – that implemented square foot and adjusted cost-of-construction methodologies.¹⁰³ These kits were presented as enabling a homeowner, “in an evening at home,” to figure out “within reasonable boundaries the cost to rebuild his home at today's prices.”¹⁰⁴ In the 1970s and 1980s, pocket guides used to calculate costs for both the room count and square foot methods were popular.¹⁰⁵

Some industry insiders suggested that for people with highly unique homes, the standard homeowners package policy – and the valuation methods commonly used to value dwellings – may not have reflected the high replacement costs of those dwellings.¹⁰⁶ Consequently, detailed appraisal (as opposed to shortcut valuation methods) was “more often used in connection with properties with high values for which the appraisal expenses constitute only a small part of the premium.”¹⁰⁷

With underinsurance ever-present in the home insurance market, pressure to value homes cost-effectively conflicted with best practice methods that had the greatest

102 Potter, “Insurance to Value.”

103 “Is Your Home Underinsured?”

104 “Impact of Rising Costs: Take a Fresh Look at Your Home Insurance.”

105 Richardson, *Insuring to Value*.

106 INA Corporation, *The Underinsured Home: Some Professional Considerations* (1977).

107 Wiening and Malecki, *Insurance Contract Analysis*.

chance of producing accurate valuations. J. Albert Burgoyne, Assistant Vice President of Liberty Mutual, explained that his company was only able to conduct detailed, accurate appraisals of a small subset of their insured properties that were highly geographically concentrated. Obtaining the benefits of detailed, accurate appraisals for a wider array of business “continues to be a problem” but is nonetheless a necessary step despite the difficulty because “how else can an insurer make intelligent recommendations?”¹⁰⁸ Despite the expensive costs to inspect physical properties and advise insureds about their insurable values, insurers were expected to supply proper values:

[I]nvariably, the average policyholder one way or another seeks counsel from the insurer or its agent in determining the amount of insurance that he should carry. We in the business are expected to be expert in our business and this in the popular mind includes being at least more expert than the policyholder in judging the value of the policyholder's property for insurance purposes. We not only can take the initiative in the determination of proper values; we are, I think, expected to do so.¹⁰⁹

The tension between expensive, comprehensive valuation of properties by appraisal professionals and cheaper, shortcut valuations generated by agents and policyholders that sacrificed accuracy was a situation in need of resolution that automatic increases in policy limits had not addressed. Consequently, the insurance industry faced an incompatibility between moral responsibility for resolving underinsurance, which it had embraced ever since underinsurance was recognized as a problem after the Depression, and the acknowledged incapability of the industry – with the methods and technologies of the time – to resolve it. The emergence of a new kind of home insurance policy, which was largely premised on innovations in dwelling estimation technology, seemed

108 Burgoyne, “What’s Happening to Dwellings.”

109 Ibid.

to be the solution to underinsurance that commentators in the industry had been waiting for. But like previous efforts to overcome underinsurance, it would ultimately fail. Only this time, the consequences of that failure would be spectacular.

Expert Systems and Guaranteed Replacement

Industry professionals were aware that cost-effective approaches to valuing dwellings, which were used in place of expensive, detailed quantity surveys, were not working well: agent and policyholder reliance on building cost tables, pocket guides, and shortcut applications of unit-count and square-foot methods provided convenient, but not necessarily accurate, estimates of replacement cost. Some in the industry hoped that the tradeoff between accuracy and cost-effectiveness would not always persist, and that insurers would be able to deliver the kind of post-loss performance that policyholders expect. For State Farm spokesman Joseph Zangerle, full insurance-to-value was a better future enabled by technology:

If it does become possible to accurately establish the “going-in” value of a home and then, through localized building cost figures, it becomes feasible to update values to a current basis, we could then theoretically produce a “No Stated Amount” Homeowners policy. An accurate computer prepared insurable value or replacement cost figure could be used to originally rate the policy and then a program similar to Inflation Coverage would keep it current, making premium adjustments as necessary. At the time of the loss, payment would be made to cover the entire loss and no adjuster would even need explain to a policyholder why his company could only pay 60% of the amount it will cost him to rebuild his home.¹¹⁰

It was a vision that insurers apparently decided to pursue. In the 1970s and 1980s, on the heels of the introduction of “inflation guard” type endorsements, insurers began to

110 Zangerle, “Inflationary Pressures on Homeowners Insurance.”

develop more sophisticated initial dwelling valuation technologies that leveraged the growing power of computing to the problem of initial valuation. Zangerle described early innovation in this area:

Now there is some hope that the computer age may come to our rescue and provide a solution to [initial valuation and regional variance in construction cost increases]. We are aware of at least one company that is currently preparing what they claim are very accurate replacement cost estimates for dwellings by use of the computer. The insured or the agent completes a form detailing information on the home involved and the computer does the rest. Under this program, building cost figures are worked out to reflect regional differences and even differences between various localities within the same state.”¹¹¹

Early efforts to automate initial dwelling valuation were undertaken by insurers in both the United States and Canada. In 1974, Halifax Insurance Company advertised an “Uncomplicator” algorithm, which the company claimed had been “well tested and proved valid as a fast and satisfactory aid to establishing replacement cost” and was “the first in-house Canadian computerized dwelling program.”¹¹² At around the same time, a U.S. construction cost estimation company – which had long provided cost data to insurers – introduced a computerized, component-based, dwelling replacement cost estimation system that promised to eliminate “a lot of the subjectivity and implicit averaging associated with square-foot and unit-count estimating methods” in order to value homes on a more individualized basis to reflect the particular components of particular homes.¹¹³

111 Ibid.

112 Don Smith, “One Company’s Answer to the Insurance-to-Value Problem,” Canadian Underwriter, 1974. Author was, at the time, Vice President Marketing at Halifax Insurance Company.

113 Richardson, *Insuring to Value*.

As computer-automated dwelling replacement cost valuation methodologies were put into use, some insurers began to offer what Joseph Zangerle of State Farm had envisioned for the industry: a no limit policy.¹¹⁴ The coverage, known colloquially as “guaranteed replacement” or “guaranteed rebuilding,” effectively removed the policy limit caps on replacement cost collection in large losses. Specific names given to the coverage varied from one insurer to another. For example, Utica National Insurance Group, called the coverage “Dwelling Protection Unlimited,” which stated that “Utica Mutual will pay whatever it takes to repair, replace or rebuild the damaged property – with no dollar limit of liability.”¹¹⁵ Whatever name particular insurers gave it, guaranteed replacement coverage entitled homeowners, in the event of covered loss, to collect compensation for the full replacement value of their homes – even if the stated policy limits proved inadequate.¹¹⁶

Throughout the early 1980s, a greater number of insurers began to offer guaranteed replacement cost policies through their own, company-specific policy forms. In 1982, the California Joint Producers Council, an organization that represents a number of insurance agent and broker associations, issued recommendations to the Insurance Services Office (ISO)¹¹⁷ regarding new homeowners revisions. One recommendation of

114 Newell, Replacement Cost Insurance. Newell writes that one company advertised guaranteed replacement coverage in Underwriters Report as early as 1974; by the end of 1975, several companies had “removed from their policies the money limit of liability.”

115 Advertisement for Utica Mutual, *United States Banker*, 1979.

116 Newell, Replacement Cost Insurance.

117 The Insurance Services Office (ISO), an industry organization, develops base home insurance policy forms for insurers to use. Insurers can also file wholly original,

the Council was that ISO provide an option for “unlimited replacement-cost coverage of the dwelling” in their standardized policies – a suggestion that ISO initially denied.¹¹⁸ In response to the Council's suggestion, ISO did, however, provide make available a “sample endorsement for replacement-cost coverage” that companies might use as a basis for developing their own guaranteed replacement coverage coverage.¹¹⁹ In 1983, Chubb advertised “guaranteed rebuilding cost coverage” in *Esquire* and *BusinessWeek*. Hartford was among the first companies to offer it.¹²⁰ Other companies providing the option of guaranteed replacement coverage to their policyholders in the 1980s included mass market insurers like State Farm and Allstate.

Guaranteed replacement cost benefits were hailed by Freddy Corlier, Jean-Francois Ingenbleek, and Jean Lemaire in the *ASTIN Bulletin* of the International Actuarial Association as a form of coverage that was beneficial to all parties. The authors, writing about a dwelling valuation model introduced by a Belgian insurer in 1983, described the “relative inability of policyholders to select proper coverage for their homes, compared

company-specific forms with the state department of insurance in each state they operate within; however, many insurers borrow language from standard policies due to the reduction in filing costs and increased legal calculability.

118 The Insurance Services office, in the 1994 revision to the 1991 Homeowners policies, did eventually formalize company-generated guaranteed replacement coverage into a standard option for ISO policies: the endorsement HO 04 01, called “Additional Limits of Liability for Coverages A, B, C, and D.” Diane Richardson, *Homeowners Coverage Guide: Interpretation and Analysis* (National Underwriter Company, 1999).

119 “How ISO Policies Meet Producers’ Suggestions,” *Underwriters Report*, February 25, 1982.

120 Audra R. Cohen, “IRS Provides Another Incentive For Insurance-to-Value,” *The Hartford Agent*, Summer 1988.

to companies, in light of their lack of training, experience, and information” and dismissed placing responsibility for proper valuation and updating on policyholders as “unrealistic.”¹²¹ A better alternative for insurers, agents, and policyholders – the authors proposed – was for insurers to rely on a computer algorithm to generate home replacement cost estimates. Based on an experiment the authors conducted with 500 homes in Belgium selected for diversity, the valuation algorithm – which depended on policyholders filling out a detailed questionnaire – produced rebuilding cost estimates that were deemed similar to estimates generated by skilled appraisers for all but the most high dollar value homes.¹²² Indeed, this component-based method was not unlike the methods being developed and implemented in the United States and Canada.

On that basis, Corlier and his co-authors argued that the best system of selecting insurable values would be the following: if homeowners would accept the replacement cost estimates supplied by their insurers on the basis of the algorithm, and would pay the premium on the basis of higher and more accurate values that would be generated by the algorithm, insurers would pay in excess of limits in the event that limits are insufficient after loss. Among the virtues that the study authors extolled, policyholders would be finally “safe from under-insurance” and would “no longer risk seeing a lifetime of savings disappear in a few hours.”¹²³ Insurers could collect more premium on the basis of higher limits. Agents would have more stability in their customer base since

121 Freddy Corlier, Jean-Francois Ingenbleek, and Jean Lemaire, “Workshop: A Model to Evaluate the Rebuilding Costs of Dwellings,” *ASTIN Bulletin of the International Actuarial Association* 16, no. 1 (1986): 45–62.

122 *Ibid.*

123 *Ibid.*

it would inhibit competition among agents to understate value, and thus premiums, to attract business. Overall, the authors characterized automatic, detailed dwelling rebuilding cost valuation as a substitute for expert assessments of initial value, as a substitute for knowledgeable manual updates to the policy limits, and as a substitute for more commonly used blunt methods of estimating replacement costs using square foot figures.¹²⁴

Insurers introduced guaranteed replacement policies in order “to increase average premium revenue per policy and to improve the correspondence between the amount of coverage and the replacement cost of the dwelling.”¹²⁵ Indeed, insurers needed a viable solution to underinsurance: in 1984, an industry survey revealed that 66 percent of American homes were insured for less than 100 percent of their current replacement cost and nearly 41 percent were insured for less than 80 percent.¹²⁶ The initial effects of guaranteed replacement policies on industry financials seemed promising: in the early years of the coverage, guaranteed replacement policies increased premium revenue by 25 percent without much increase in loss costs.¹²⁷

The market shift to guaranteed replacement cost on a wider scale began in 1985.¹²⁸ A common implementation of the guaranteed replacement benefit was the following: if an insured agreed to insure his or her home to the replacement value supplied by his or

124 Ibid.

125 Homeowners Insurance, 1993-1995: Rebuilding After Andrew (Conning & Company, 1993).

126 “Insurance to Value Means Protection for the Homeowner...and You.”

127 Homeowners Insurance, 1993-1995: Rebuilding After Andrew.

128 Homeowners Insurance: The Problem Is the Product (Conning & Company, 1996).

her insurer, if an insured allowed his or her insurer to adjust the limits to keep pace with inflation, and if an insured reported property improvements that increased replacement value by 5 percent or more, the Coverage A limit would be adjusted post-loss if policy limits were insufficient¹²⁹ – though additional costs to rebuild homes in compliance with current building codes was not necessarily included. By 1996, a large majority of homes were insured with guaranteed replacement cost benefits.¹³⁰ Having guaranteed replacement was viewed by the Insurance Services Office as a definitive consumer benefit: “[I]n the absence of this option, the policy limit might be insufficient if, for example, a major catastrophe in the area drove up the prices of building materials, construction labor, and other goods and services.”¹³¹

There are numerous reasons that were given in the industry literature, in retrospect, for why insurers transitioned toward guaranteeing their property valuations. One is that insurers sought to collect increased premiums on the basis of increased valuations; a second is that insurers sought to resolve the frequent dissatisfaction policyholders experienced when they found their payouts inadequate to cover their losses; a third is that the guarantee was enabled by improvement in construction cost data supplied by

129 Richardson, *Insuring to Value*.

130 Homeowners Insurance: The Problem Is the Product; “Replacement Cost Insurance: Actual Cash Value Vs. Actual Cost,” *FC&S: Personal Lines (Dwellings)*, October 2002: M33. Typically, guaranteed replacement coverage was not made available to homes in the highest risk areas that were more than 25 years old (but sometimes exceptions were made for older homes with updated heating and electrical systems), and homes of exceptionally unique construction. In California, all insurers “were using the guaranteed replacement policies at the time of the Northridge Earthquake except for State Farm.” Jerry A. Ramsey, *Underinsurance (United Policyholders, 2003)*, www.uphelp.org/pdfs/underinsurance.pdf.

131 Homeowners Insurance: Threats from Without, Weakness Within, *ISO Insurance Issues Series (Insurance Services Office, 1996)*.

governmental and private sources.¹³² A fourth reason is that the guarantee was formally introduced into replacement cost policies to resolve a legal ambiguity over whether the legal meaning of “replacement” meant to replace a structure to its depreciated pre-loss condition or to replace it with a new substitute; a fifth reason is that the high interest rates in the late 1970s enabled carriers to have an income opportunity through investing premium income, so they relaxed their underwriting standards in order to collect additional premium revenue.¹³³ A sixth reason hinges on the claim that the industry was merely formalizing their obligations under the legal environment in the 1980s that, some argued, held the insurer responsible for the full cost of repair or replacement irrespective of policy limits: the “insurer would likely end up paying the full loss anyway” due to an “insured's 'detrimental reliance' on information provided by the insurer if the insured chose an inadequate limit of insurance based on the insurer's appraisal.”¹³⁴ No matter the combination of factors that led the industry to embrace guaranteed replacement coverage, guaranteed replacement was at least partially premised on its potential to improve insurance-to-value.

The Failure of Guaranteed Replacement

Despite its wide diffusion throughout the insurance marketplace throughout the 1980s and early 1990s, guaranteed replacement was not to last as a widespread home insurance market institution. The Loma Prieta earthquake (1989), the Oakland Hills fire

132 Wiening and Malecki, *Insurance Contract Analysis*.

133 Richardson, *Insuring to Value*.

134 Wiening and Malecki, *Insurance Contract Analysis*.

(1991), Hurricane Andrew (1992), and the Northridge Earthquake (1994) created heavy, unanticipated losses for the insurance industry.¹³⁵

A major factor affecting the size of the losses, according to industry analysts, was the large number of policies with guaranteed replacement provisions. As one industry analysis firm estimates, had the shift to guaranteed replacement cost not happened, it would have saved the industry as much as \$10 billion on loss costs resulting from catastrophe losses from 1989 through 1995 that in total had cost roughly \$32 billion.¹³⁶

Why were guaranteed replacement policies to blame for unanticipated losses sustained by the insurance industry after the 1990s disasters? A number of contributing factors have been given within the industry. A big one, according to industry commentators, was the fact that the aftermath of the disasters of the 1990s led to a situation the insurance industry called “demand surge” – a condition describing the fact that the actual replacement costs of homes under post-disaster conditions of reduced supply of labor and materials exceeded the replacement valuations of the homes for which insurers had collected premium.¹³⁷ Since home replacement cost valuations that insurers had calculated in advance of loss were so very inaccurate, yet guaranteed replacement benefits made insurers liable for the additional, unanticipated costs beyond their premium basis, insurers sustained much larger losses in the disasters than anticipated. In their efforts to value dwellings, insurers had unsuccessfully accounted

135 Homeowners Insurance, 1993-1995: Rebuilding After Andrew.

136 Homeowners Insurance: The Problem Is the Product.

137 The Impact of Catastrophes on Property Insurance, ISO Insurance Issues Series (Insurance Services Office, 1994).

for the cost-estimation consequences of correlated losses.

A second contributing factor that has been given within the industry for the failure of guaranteed replacement was the pressure exerted by the courts and state insurance commissioners to grant policyholders who sustained losses in high-profile disasters policy benefits that were not included in their contracts. Apparently, under pressure from the courts and from insurance regulators, insurers extended guaranteed replacement benefits to policyholders who did not have the coverage in their policies because insurers had difficulty proving that the high-quality coverage was offered and rejected. Moreover, though building code upgrade coverage was not necessarily included in guaranteed replacement provisions offered by insurers,¹³⁸ insurance regulators in the aftermath of the disasters pressured insurers to cover the additional costs to bring reconstructed buildings into compliance with current codes even when such coverage was not included in the policy.¹³⁹ Essentially, aside from the problem of demand surge, insurers found that their claim liabilities exceeded their valuations due to legal and regulatory pressures.

A third factor that was given within the industry for the failure of guaranteed replacement policies was the insufficiency of methodologies used to calculate

138 Pamela Sherrid, "This Is What They Call Shelter?," U.S. News & World Report, April 11, 1994.

139 The Impact of Catastrophes on Property Insurance. It is important to note that guaranteed replacement benefits entitled policyholders to more compensation than they would otherwise be entitled to – but not to extend that observation to conclude that policyholders had an easier time collecting the compensation they felt they deserved from their insurers. For some discussion of the post-disaster claims during the guaranteed replacement cost era, see: Stanley Moss, "Insurance: The Second Oakland Firestorm," California Journal, November 1, 1992.

replacement costs. Leading supplier of construction cost estimation software and cost data, Marshall & Swift/Boeckh, contended that despite the increasing availability of component-based estimation systems in the 1980s and 1990s, insurers continued to use outdated and subjective methods of valuation, like the square-foot method, that were ill-suited to accommodate the decreasing standardization of the housing stock throughout the 1980s and 1990s; “main street” homes were increasingly built custom or made custom through home renovation.¹⁴⁰ This reason harkens back to the explanations insurance commentators stressed for inadequate insurance-to-value in prior periods of insurance history: many insured properties were neither valued accurately initially for post-disaster replacement costs nor were those policies accurately updated over time.¹⁴¹

The fourth contributing factor aired within the industry for the failure of guaranteed replacement policies was that guaranteed replacement policies had inadvertently introduced a problem of moral hazard. Since guaranteed replacement policies entitled policyholders to compensation in excess of policy limits in the event of loss, it gave policyholders, and even agents, little incentive to report property renovations.¹⁴² Consequently, home insurance valuations, which insurers used as a basis of estimating loss liabilities and revenue requirements, were suppressed due to the reactive nature of dwelling risks under guaranteed replacement policies.¹⁴³

140 Peter M. Wells, *Insuring to Value: Meeting a Critical Need* (National Underwriter Company / Marshall & Swift/Boeckh, 2007).

141 Richardson, *Insuring to Value*.

142 Wells, *Insuring to Value: Meeting a Critical Need*.

143 Another reactive risk under guaranteed replacement policies may have been post-loss moral hazard by policyholders and contractors. It is possible that, presented

Insurers in the mid-to-late 1990s implemented significant changes pertaining to underwriting, claims, and insurance pricing. A major objective of insurers was to reduce their exposures. Some of these strategies included restricting coverage for particular perils (i.e. earthquake in California), reducing the concentration of their exposures, redesigning claims and underwriting processes, raising rates, and restricting policy benefits for covered perils.¹⁴⁴ A major change, affecting the coverage policyholders received through their home insurance contracts, was the wide scale withdrawal of guaranteed replacement cost provisions from the marketplace. Indeed, by the early 2000s, all but a few insurers had completely eliminated guaranteed replacement coverage from their policy offerings.

with coverage for rebuilding costs that would be “guaranteed,” homeowners may have engaged in less cost-minimizing and bargaining activities than they might have under a more limited policy. Yet, the dominant discourse within industry literature after the 1990s disasters for the unanticipated high claims costs included: over-concentration of exposures, severe underestimation of replacement costs due to post-disaster demand surge, inaccurate catastrophe and loss severity models, the pressure for insurers to extend guaranteed replacement coverage even to those who did not have it, and the pressure to cover code upgrades (because policy language was ambiguous). For further discussion of reactive risk, see: Heimer, *Reactive Risk and Rational Action*.

- 144 The realization among insurers that the guaranteed replacement product had been based on faulty assumptions, and the subsequent efforts by insurers to reform underwriting, change insurance coverage terms, and revisit their catastrophe models is consistent with the generalizations that Richard V. Ericson and Aaron Doyle have made about how insurers embrace uncertainty. The authors argue that insurers develop new products without having much loss experience to soundly underwrite those products. In other words, they embrace uncertainty in pursuit of profit. Often, insurers profit from those product innovations; however, sometimes the outcome of venturing into such uncertain territory can be disastrous when the assumptions upon which those products are based are proven to be false. On the heels of big losses, insurers undertake efforts to change the assumptions that buttress their policies and convert policyholders to new contracts with assumptions that are more favorable to insurers. The authors argue that this conversion “actively borders on, and frequently transverses, market misconduct and fraud.” Ericson and Doyle, *Uncertain Business*.

So despite the tremendous popularity of guaranteed replacement policies and endorsements among the public, despite the 2002 contention by the Insurance Services Office that guaranteed replacement cost coverage “provides the insured with true peace of mind and the insurer receives more premium dollars” and is “desirable for all involved,” and despite the fact that total losses constitute only 4 percent of all losses,¹⁴⁵ guaranteed replacement benefits were mostly phased out in the late 1990s and early 2000s by home insurers in the United States. The innovation ended up being a failed long-term solution to the problem of underinsurance. And, to the extent that guaranteed replacement introduced new problems of moral hazard and reactive risk into the home insurance marketplace, guaranteed replacement policies magnified the consequences of the inability of insurers to supply adequate insurance-to-value for the masses.

THE ERA OF LIMITED LIABILITY FOR LIMITS

On the heels of the 1990s disasters, many insurers transitioned their new and renewal guaranteed replacement policies to a type of home insurance coverage sometimes called “extended replacement.” Extended replacement policies provide additional compensation above policy limits up to a cap, where that cap is set as a fixed percentage of the dwelling limit.¹⁴⁶ The Insurance Services Office, in its 1994 revision

145 “Replacement Cost Insurance: Actual Cash Value Vs. Actual Cost”; Moody’s Investors Service, “U.S. Property and Casualty Insurance: Let Consolidation Begin,” news release, April 1995; Jaffee and Russell, “Catastrophe Insurance, Capital Markets, and Uninsurable Risks.”

146 REG-2010-00001 Standards and Training for Estimating Replacement Value on Homeowners Insurance, California Department of Insurance (Initial Statement of Reasons, California Department of Insurance).

of the Homeowners 1991 program, called its version of extended replacement coverage: “Specified Additional Amount of Insurance for Coverage A – Dwelling.” It makes an additional percentage of the Coverage A limit, either 25 percent or 50 percent, available to policyholders in the event that a covered loss exceeds the Coverage A limit.

Extended replacement policies are equivalent to guaranteed replacement cost policies in the sense that insurers continue to rely on expert systems to establish insurable values, continue to adjust insurable values using expert systems, continue to present those values as post-disaster home replacement costs (albeit less explicitly than in the guaranteed replacement era), and continue to collect premium revenue on the basis of those insurer-supplied values. It is also similar inasmuch as the extended replacement cost policy benefit is characterized as a safeguard against demand surge after catastrophe.¹⁴⁷ It is different in the very important respect that the insurer no longer guarantees the accuracy of its home replacement cost valuations. The widespread transition away from guaranteed replacement marks, in an important respect, a return to the home insurance market of 60 years ago: the compensation that individuals can typically collect under extended replacement home insurance policies are limited by policy caps. The policy caps can be too low to enable replacement cost home insurance policies to function as they were intended: to supply sufficient compensation for individuals to rebuild their homes after disaster.

Insurers have taken measures to limit their liability for the home replacement cost valuations they provide to policyholders. Since the late 1990s disasters, insurers and

147 Homeowners Insurance: Threats from Without, Weakness Within.

insurance industry groups have stressed that insurer-supplied property valuations are merely coverage recommendations or estimates that are meant to assist policyholders in choosing their own coverage limits.¹⁴⁸ In this view, it is the policyholder, not the insurer or agent, who bears the responsibility for selecting coverage limits¹⁴⁹ – regardless of whether the insurer calculates the value of the policyholder's home and supplies that figure to the policyholder. The meaning communicated by these acts stands in sharp contrast with previous eras of insurance history: the industry has endeavored to redefine moral responsibility for underinsurance from a duty of the insurer and agent, which was the dominant meaning communicated in industry documents from the 1940s to the

148 In the words of Dan Dunmoyer, president of the Personal Insurance Federation of California: “Insurers offer a general estimate. That’s all. Recommendations listing coverages and costs are then provided to the prospective insurance buyer on a disclosure form known as the Residential Disclosure form. At that point it is the prospective buyer’s responsibility to make the final decision to accept, change or reject the coverages.” Letter to Liz Pulliam Weston, Re: Response to MSN Money Article: Homeowners, demand your (insurance) rights, from Dan Dunmoyer, President Personal Insurance Federation of California, January 26, 2005, <http://web.archive.org/web/20051210151627/http://pifc.org/Media/pdfiles/2005/oped012605.pdf>.

149 Letter to the Editor, Re: Underinsured?, by Dan Dunmoyer, President of the Personal Insurance Federation of California (PIFC), September 1, 2004. While the emphasis that insurance industry groups put on policyholder selection of policy limits is strong today, and indeed is much stronger than ever before, it is not entirely new. In the mid-1970s, which was after the period in which insurers emphasized the role of agents in eliminating underinsurance through salesmanship but prior to the advent of guaranteed replacement, some authors of insurance publications explicitly assigned the responsibility of coverage analysis to policyholders. In the words of one author, the “agent, in acting in his professional capacity, realizes that he must not become involved in establishing values for insurance purposes”: “it is up to the purchaser, i.e. the policyholder, to establish values for insurance when he buys.” Mustard, “Insurance to Value Resistance? Offer to Buy the Client’s Home for the Amount of His Coverage.” Another described that that the average homeowner had the obligation to “review his insurance policy often, periodically raising the policy limits to keep pace with inflation.” “What Have You Got to Lose?,” *Journal of American Insurance*, 1974.

1990s, to a primary duty of the policyholder.

Insurers have also aggressively pursued legal precedent to firmly anchor their limited liability for underinsurance. An example of their success is a 2008 California appellate case decision that has been interpreted by insurers as underscoring the policyholder's responsibility, not the insurer's responsibility, for selecting coverage limits.¹⁵⁰ The assignment of responsibility presumes that policyholders have the relevant expertise to evaluate their coverage as well – or better – than the companies insuring them.¹⁵¹

150 *Everett v. State Farm* (2008) 162 Cal. App. 4th 649. The plaintiff, Agnes H. Everett, had a guaranteed replacement policy with State Farm. In 1997, State Farm sent notice to all of its insureds that guaranteed replacement coverage was discontinued. Everett continued paying her premium and renewing with State Farm on a yearly basis; she did not contact her agent to ask for her policy to be reviewed at any point. When a fire destroyed her home, she discovered that the costs to replace her home exceeded the coverage available under her policy. She sued State Farm for breach of contract, breach of the duty of good faith and fair dealing, promissory fraud, fraudulent misrepresentation, negligent misrepresentation, and reformation of her policy. State Farm filed a motion for summary adjudication, which the trial court granted. State Farm filed a motion for a judgment on Everett's claim of reformation, and the trial court found in State Farm's favor. Upon appeal, the higher court upheld the lower court's decision.

151 In what seems like an acknowledgment of the incapability of policyholders to estimate the replacement costs of their homes, public relations materials by insurers and insurance industry groups advise policyholders who are concerned about potential underinsurance to contact their insurance agents and/or to hire local contractors to appraise home rebuilding costs. The recommendation to contact one's agent OR hire a contractor connotes that the two actions are equivalent. But in reality, if insurers have been unable to adequately insure homes to value due in part to exclusion of certain categories of rebuilding costs, omission of demand surge in replacement cost calculations, and use of data about the home and location which is not as granular as it might be (because of inherent limitations of the software or agent operation of that software), why should policyholders view the recommendations agents provide as being as good as one provided by a contractor who is trained to do appraisals? Thus, the suggested equivalence between a policyholder's act of getting an estimate from his or her agent and the act of hiring a reconstruction contractor may create a false sense of security in the adequacy of

Few homeowners can now obtain a guaranteed replacement insurance policy on their home.¹⁵² The very few insurers who continue to offer guaranteed replacement coverage do so despite the higher losses on grounds that “replacement means replacement,” even though – like their counterpart insurers who do not offer guaranteed replacement coverage – home insurance replacement cost valuations have proven to be underestimates of the costs to rebuild homes following disaster.¹⁵³ These companies, which serve premium dwelling risks, have taken the strategy of what Ericson and Doyle have called “absorbing” residual uncertainty.¹⁵⁴ For these companies, accepting liability for valuation inaccuracy may be feasible in light of the overall profitability of their risk portfolios.

What is the underinsurance situation like now? Rates of underinsurance published by Marshall & Swift/Boeckh since the mid-1990s reveal that nearly two-thirds of homes are insured with policy limits that are inadequate for rebuilding.¹⁵⁵ Policyholders

policy limits, if the policyholder has been in contact with his or her agent. This idea will be developed further in the chapters to follow.

152 Dean Calbreath, “No satisfaction - Homeowners with heavy losses in the October firestorms file a variety of insurance grievances with the state,” *San Diego Union-Tribune*, May 16, 2004: H-1.

153 *Ibid.*

154 Ericson and Doyle, *Uncertain Business*.

155 In 2012, MSB released underinsurance statistics showing that 61 percent of homes are underinsured by 18 percent. Marshall & Swift/Boeckh, *Marshall & Swift/Boeckh Insurance to Value Index for Residential Properties Continues to Improve*. This is an improvement upon earlier statistics – a difference that may be due to adoption of more accurate valuation technologies, as MSB argues. However, the “improvement” may also be explained by the fact that construction and supply costs, as estimated by the Construction Price Index, have decreased 10 percent from 2007 to 2011. Using data gathered in 2008, MSB reported that “64 percent of U.S. homes are undervalued for the purpose of insurance by an average of 19 percent.”

following recent disasters have contended that their policy limits and extensions were insufficient to meet post-disaster rebuilding costs – a contention that was validated by the California Department of Insurance in an investigation into insurer replacement cost methodologies.¹⁵⁶

The Marshall & Swift/Boeckh (MSB) company, a major supplier of construction cost estimation software and data to the insurance industry, suggests that a major cause of underinsurance in recent disasters is that insurers have been slow to adopt advanced component-based estimation technologies. Moreover, to the extent that insurers did adopt the best available technologies, argues MSB, they applied it only to their new business but failed to systematically re-value homes in their old book of business that were originally valued under less accurate methods.¹⁵⁷

The impression one gets from arguments advanced by Marshall & Swift/Boeckh is that persistent underinsurance, in the future, will slowly be mitigated by technology. As insurers adopt the latest and greatest valuation technologies on a more widespread scale

Marshall & Swift/Boeckh, “MSB: Degree of Home Undervaluation Shifts in 2008,” news release, June 17, 2009, <http://www.msbinfo.com/Company/News/17>. MSB started measuring underinsurance periodically after Hurricane Andrew. The first measurement of underinsurance, in the aftermath of Andrew was that “73 percent [of homes] were underinsured by 35 percent;” in 2004, the measure was “61 percent of the houses were underinsured by 25 percent on average.” Investigatory Hearing on Underinsurance and the Determination of Home Replacement Costs, California Department of Insurance (2004) (statement of Bob Dowdell, CEO of Marshall & Swift/Boeckh). Throughout the period, MSB statistics reveal that the majority of homeowners have been underinsured.

156 Investigatory Hearing on Underinsurance and the Determination of Home Replacement Costs; REG-2010-00001 Standards and Training for Estimating Replacement Value on Homeowners Insurance.

157 Wells, *Insuring to Value: Meeting a Critical Need*; Richardson, *Insuring to Value*.

and as data from multiple sources becomes more integrated into sophisticated expert valuation systems, valuation accuracy will improve.

Yet, the extent to which insurer application of expert systems can ever ensure that coverage limits match post-loss replacement costs of dwellings is an open question. The potential for such systems to accurately forecast post-disaster replacement costs for homes depends fundamentally on multiple sources of valuation uncertainty that have persisted through much of the post-Depression history of home insurance.

Limitations of Home Replacement Cost Valuation

Home replacement values are non-market values: replacement values are the sum of the costs required to replace a home – not the price of a home if it were offered for sale. A home's replacement value is both a function of future market prices of labor and materials and a function of individual features of the home. As such, there are two inherent challenges in home replacement cost valuation. First, a perfect home insurance replacement cost valuation would require information, down to the very last detail, about an individual home's components. Second, as a forecast of future conditions, perfectly accurate valuation would require future prices for obtaining and reassembling those components, down to the very last detail, at the date of rebuilding.

Yet, actors in the insurance industry have struggled to develop technologies of assigning values to homes that overcome these inherent difficulties in valuation. How valuation technologies are developed, how they become taken for granted, how they fall short, and how actors in markets struggle to correct perceived shortcomings of failed or incomplete technologies are questions of great interest to economic sociologists who

study markets. These questions pertain to the “how” of valuation: the arguments and techniques social actors use to “elicit monetary value where value is hard to produce.”¹⁵⁸

Outdated Variables

The disasters of the 1990s may have exposed the limits of home replacement cost valuation technologies to accurately forecast future conditions most spectacularly, but these valuation problems have been long been present in the home insurance market. Home replacement cost valuations have historically been inaccurate, and will probably remain inaccurate for the foreseeable future, due to three problems inherent in insurance valuation: the problem of outdated variables, the problem of omitted variables, and the problem of correlated losses.

In the era of salesmanship, which I have called the period extending from the end of the 1930s to the late 1960s, actors in the insurance industry implicated inflation as the primary cause of underinsurance. Since the costs of goods and services were escalating, but policy limits were based on figures fixed at a particular point in time, policy limits on homes became outdated with the passage of time – if those figures were not updated by agents and the limits recalculated.

Techniques to automatically increase policy limits aimed to address the problem of outdated costs of goods and services. Yet, not long after its introduction, automatic increases were identified by actors in the insurance industry as only a partial solution to the problem of outdated costs. Since the amount a policy would increase over a policy period was agreed upon a-priori, while the amount of inflation that actually occurred

158 Fourcade, “Cents and Sensibility.”

could only be assessed in principle ex-post, automatic increases in policy limits could not accurately track the amount of inflation that occurred over a given policy period. This failure of automatic increases in policies to address outdated costs had the potential to become even further compounded when relied upon over multiple policy periods.

Outdated costs again became resonant within the industry after home replacement cost valuations generated in the guaranteed replacement era proved inadequate. Industry insiders argued that a major reason why valuations were so insufficient after the 1990s disasters was due to the insured housing stock becoming increasingly individualized – as individuals took on home remodeling projects that modified their tract homes in unique ways. Actors in the insurance industry explained the mismatch between the (outdated) home features used to generate valuations and actual home features as primarily due to moral hazard among agents and policyholders. According to the industry, since agents and policyholders expected guaranteed replacement policies to cover their homes, no matter if the insurable values were inaccurate, a policyholder would have little incentive to update the values – since to do so would increase the policyholder's premium.¹⁵⁹

Currently, industry insiders continue to blame policyholders for underinsurance,

159 I offer an alternative perspective on why policyholders might “fail” to report improvements, which I develop in Chapter 3 and Chapter 5. Suffice it to say here that while insurance industry groups cast unreported property improvements as the outcome of policyholder negligence or moral hazard (i.e. deliberate action to avoid premium increases), it is likely the case that policyholders take for granted, due to their prior experiences in the insurance market, that their coverage will be adequate. In addition, survey research suggests that people believe that home insurance covers the full costs to restore one's home.

contending that they commonly fail to report property improvements.¹⁶⁰ To the extent that a policyholder modifies his or her home without reporting those modifications, he or she outdates key variables used to calculate the home's replacement costs. On the other hand, insurance consumer advocates stress that insurers do not routinely inspect dwelling properties for mass market properties, which would likely reveal increases in insurable values that policyholders may not have identified as important. Indeed, history shows that inspection is an underwriting practice that industry insiders have historically championed, but dismissed as cost prohibitive for mass market dwellings.

The 1990s disasters revealed that while homes might naively seem like fixed objects, from the standpoint of replacement cost valuation, homes are actually dynamic in their composition over time. Outdated dwelling composition information will probably continue to restrict the ability of valuation technologies to generate more accurate insurable values. Insurers may still resist re-inspection of properties to ensure that valuations remain accurate. Policyholders may still “fail” to report property improvements – due to deliberate cost/benefit analysis or simply due to misunderstanding. Insurance routines and policyholder actions, together, both produce uncertainty about whether home composition is accurately reflected in insurance valuation.

160 Investigatory Hearing on Underinsurance and the Determination of Home Replacement Costs; Wells, *Insuring to Value: Meeting a Critical Need*. Fireman's Fund Insurance Company, “Fireman's Fund: Too Many Underinsured for Fire,” news release, August 31, 2004.

Omitted Variables

Actors in the insurance industry, especially in the 1970s, became increasingly aware that automatic limit increases could not address underinsurance caused by outdated costs. As home insurance policies penetrated the mass market through the 1950s and 1960s, insurers often relied on valuation methods that omitted detail regarding the composition of homes. Using professionals skilled in valuation on an individualized basis was viewed as cost-prohibitive. Many in the industry became aware that not relying on detailed, individualized valuation, but instead on methods that omitted variables significant for accurate valuation, was contributing to the underinsurance problem.

Computerized, algorithmic expert systems that were used to value dwellings and were “designed to replicate the thought process used by underwriters for risk selection, pricing, and determination of coverage terms and conditions”¹⁶¹ were thought to be the “silver bullet” for resolving the problem of omitted variables. Through these systems, insurers could collect more detailed information and use that information as a basis of calculating dwelling valuations. In fact, insurers began to take for granted the accuracy of their dwelling valuations, to the extent that they eventually guaranteed that they would be sufficient after loss and promising to pay the difference in the event that they were not. Unfortunately, these expert systems proved not to be the solution to the problem of underinsurance that industry insiders hoped for.

161 Donna J. Popow, *Property Loss Adjusting* (American Institute for Chartered Property Casualty Underwriters, Incorporated, 2003). The expert systems automatically accept accounts that fall within guidelines. Properties falling outside the guidelines can be referred to underwriters for evaluation.

Some insurance regulators have suggested that the customized valuation software programs that insurers use in actual practice for underwriting and property valuation may produce inaccurate results because current programs do not require users to enter sufficient detail about the property to obtain policy valuation estimates.¹⁶² Calls by the California Department of Insurance for inclusion of omitted variables known to greatly affect rebuilding costs but which are not generally included in valuation methodologies have been met with stiff resistance by the industry.¹⁶³

162 Insurers may not use standard versions of commercially available valuation software; instead, they may implement data supplied by Marshall & Swift/Boeckh (MSB) into their own, company-specific underwriting software programs. As Bob Dowdell, CEO of MSB in 2004 put it, “[w]e sell data to carriers and we sell software and data to carriers.” Investigatory Hearing on Underinsurance and the Determination of Home Replacement Costs. Also, some have contended that the cheaper residential estimation products produced by MSB (i.e. Quick Quote and Residential Xpress), which agents may be using, are less accurate than the fully featured (and twice as expensive) Residential Estimator 7. Robin K. Olson, “Personal Lines Insurance Coverage Gaps: Analysis and Resolution,” CPCU eJournal, March 2010. George Kehrer, consumer advocate, contractor, and attorney, conducted an analysis of claims in the aftermath of the 2003 wildfires using MSB residential estimation software and concluded that for underinsured policyholders “the Marshall & Swift Quick Quote, for some odd reason, equates almost identically to the coverage that the insurance company provided on these homes” but that when MSB software is used correctly, the valuation on those homes is “very close to the actual loss.” Investigatory Hearing on Underinsurance and the Determination of Home Replacement Costs, California Department of Insurance (2004) (statement of George Kehrer, 1991 Oakland Hills fire survivor (also Executive Director of Community Assisting Recovery Efforts)). Though, Bob Dowdell, CEO of MSB in 2004, said that “Quick Quote is a product that, quite frankly, not many carriers use. I think it came out in around 2000 or so. It was designed to really enable an agent to get a ballpark estimate of what a property might be insured for without going through the details of this type of thing.” Investigatory Hearing on Underinsurance and the Determination of Home Replacement Costs.

163 REG-2010-00001 Proposed Regulations on Standards and Training for Estimating Replacement Value on Homeowners Insurance, California Department of Insurance (written statement of Robert W. Hogeboom on behalf of the Alliance of Insurance Agents and Brokers, Association of California Insurance Companies, Insurance Agents and Brokers Association of California, National Association of Mutual

Indeed, particular costs that prove significant for total disaster losses have been routinely omitted from calculations of dwelling insurable values.¹⁶⁴ Some of these costs include soil compaction and testing, septic systems, hillside foundations and pilings.¹⁶⁵ To the extent that the costs to replace a home's septic system or foundation is not included in the home's insured value, the costs to replace these dwelling components in the aftermath of disaster can contribute to policy limit insufficiency. In the Oakland Hills fire of 1991, the San Diego wildfires of 2003, and the San Diego wildfires of 2007, the fires burned so hot that septic systems and foundations had to be replaced.

Code upgrades present another significant omitted variable problem. Historically, insurers have excluded coverage for increases in costs arising from the need to rebuild destroyed structures in accordance with current construction and public safety ordinances. For losses occurring in the 1990s disasters, insurance regulators contended that the exclusion of code upgrade coverages in policies was in fact ambiguous, since the policies were marketed as “guaranteed” replacement. After those disasters, insurers clarified the exclusion of code upgrade costs and introduced a new “limited ordinance or law” coverage that, if included in the policy, would provide up to 10 percent of the dwelling limit to comply with those requirements.¹⁶⁶ In some policies, it is included by

Insurance Companies, Pacific Association of Domestic Insurance Companies, Personal Insurance Federation of California, and Western Insurance Agents Association.).

164 REG-2010-00001 Standards and Training for Estimating Replacement Value on Homeowners Insurance.

165 Residential Cost Handbook (Marshall & Swift, 2000).

166 Homeowners Insurance: Threats from Without, Weakness Within.

default; in others, law and ordinance is a policy option.

Presumably, there are at least two reasons why insurers seek to restrict code upgrade coverage. First, jurisdictions may have idiosyncratic building codes on the books. The changing nature of these codes, and the potentially overlapping requirements, makes it difficult to track the effect of code changes on valuation. It is much less prohibitive to instead reduce or omit code upgrade effects from valuation estimates. Second, when jurisdictions develop and implement code changes on the heels of a major regional disaster, policyholders are required to rebuild their homes in compliance with those changes. These code changes can vary depending on jurisdiction, raising post-disaster rebuilding costs considerably in disaster-affected areas. Insurers may find it difficult to anticipate code changes enacted after disaster in particular jurisdictions.

Yet, inadequate code upgrade coverage is a major reason homeowners are often underinsured following disaster. For example, in a jurisdiction that mandates a specified width for driveways of newly constructed homes to better enable fire truck access, a homeowner who loses a home that was built before the ordinance took effect and who therefore has a narrower driveway, may find that her policy provides her with an insufficient amount to cover the costs of driveway modification. These post-disaster code compliance costs can, and often do, exceed the limited coverage available for them in standard home insurance policies.

Omitted variables are key impediments to generating accurate home replacement costs. Insurers and insurance agents may not routinely collect detailed enough information in the underwriting process about home components inasmuch as they omit

variables that bear significantly on replacement costs but are costly or difficult to identify. Obtaining granular information about these variables may be too expensive for agents and insurers serving the mass market to collect on a wide scale. Moreover, insurers may continue to be reticent to include full code upgrade coverage, due to the unpredictability of code upgrade costs after loss.

Correlated Losses

Prior to the 1990s disasters, there seemed to be little acknowledgment of one major source of uncertainty in any effort to generate insurable values that would be adequate to replace homes following disaster: the effects of correlated losses on labor and materials prices. Increased demand and decreased supply for labor and materials in the aftermath of disaster escalate rebuilding costs considerably,¹⁶⁷ which can leave policyholders with insufficient limits to rebuild – inasmuch as those limits were not generated to account for post-disaster cost increases.

Valuation algorithms do not routinely account for the higher costs of rebuilding in the post-disaster context; those additional costs are handled, in many policies, by entitling policyholders to additional compensation up to a fixed percentage beyond the limit. But those limits have proven inaccurate following previous disasters. As I will show in Chapter 6, policyholders who were underinsured following the 2003 San Diego Wildfires were often severely underinsured – such that they could not rebuild a house, similar to the one they lost, for the amount of the insurance compensation available to

167 Anna H. Olsen and Keith A. Porter, “What We Know About Demand Surge: Brief Summary,” *Natural Hazards Review* 12, no. 2 (2011): 62–71.

them under their replacement cost insurance policies.

Insurers experienced the unpredictability of price increases after loss following the 1990s disasters, and sought to limit their liability for those uncertain costs through the re-introduction of policy caps following almost two decades of widely available guaranteed replacement coverage. It does not seem possible that insurers will ever be able to precisely forecast post-disaster price markups that raise home replacement costs beyond usual and expected construction costs under normal market conditions.

Even if insurers were, in theory, capable of predicting post-disaster prices, insurance executives have reasoned in regulatory hearings that it is not appropriate to base home valuations on those higher post-disaster costs, since it amounts to over-insuring run-of-the mill, non-disaster losses.¹⁶⁸ This argument appears to be essentially about moral hazard: excess insurance raises the possibility of policyholder opportunism.

THE FUTURE OF UNDERINSURANCE

Has the insurance industry abandoned efforts to resolve underinsurance? Certainly the rhetoric deployed by spokespeople for insurance industry organizations and by

168 When asked by a California Department of Insurance attorney about why it appears that replacement cost estimates do not account for demand surge following catastrophe, even though he estimates that the surge is about 20 percent, the president of Marshall & Swift replied: "That would be true because we simply can't predict that. We are trying to estimate replacement cost of an individual home. And, of course, if we try to estimate that because of disasters it would be inflated by 20 percent, we would be overestimating the cost of a single home that happens to catch fire and go down." Investigatory Hearing on Replacement Cost Calculation Methodology, Before the Insurance Commissioner of the State of California, California Department of Insurance (1997) (statement of Bob Crine, President of Marshall & Swift/Boeckh).

insurance executives in regulatory hearings marks a decided shift in the assignment of responsibility: determination of property value is cast by these entities as entirely the responsibility of policyholders – not the responsibility of agents nor insurers. Publicly, insurers have assigned blame for underinsurance, and responsibility for its resolution – to policyholders.

Behind the scenes, are insurers working to resolve underinsurance? It is likely the case that insurers are invested in ushering in advances in valuation technology that, with minimal marginal cost, leverage new and more detailed data sources in their valuation methodologies. Insurers will always be fundamentally interested in understanding the nature of their risks.

It is unlikely that insurers will start to incur the costs of detailed dwelling inspection and professional valuation for mass market homes; such appraisal expertise is used by insurers serving only the most preferred risks.¹⁶⁹ Insurers have increasingly included, in materials geared toward policyholders, the invitation to hire their own dwelling

169 It appears that only insurers who specialize in high value homes routinely send highly-qualified professionals out to conduct detailed inspections and evaluations. On this point, see Ron Panko, “Insuring to Value,” *Best’s Review*, November 2003. Policyholders cannot simply opt into insurance through such companies by exercising their market choice. Underwriting guidelines of high value/low risk specialty insurers are stringent; just because a person has the money to pay the premium for insurance with a company that arranges for thorough valuations does not necessarily mean that the person fits the company’s underwriting guidelines. According to a CDI report, in California as of June 2003, the majority of home insurance companies writing in California had dollar coverage limits included in their underwriting guidelines. Of all insurers, 21 percent of companies had maximum coverage limits between \$100,000 and \$500,000; 27 percent had maximum coverage limits falling somewhere between \$500,000 to \$1m; 8 percent had a \$1m limit; and, another 7 percent had a maximum coverage limit that exceeded \$1m. Don McNeill, *Underwriting Guidelines and Access to Home Insurance* (Policy Research Division, California Department of Insurance, 2004).

valuation specialists to appraise their homes. When a policyholder secures an independent assessment of value, the insurer obtains what may be a more accurate valuation, and thus potentially increased premium, without incurring the costs to generate that valuation. Moreover, a policyholder supplied professional valuation also would likely make liability for the sufficiency of home insurance limits, in cases of dispute regarding coverage insufficiency between policyholders and insurers, more clearly assigned to the policyholder than to the insurer or agent. Furthermore, just as insurer-supplied replacement cost valuations are subject to uncertainty regarding the future post-disaster prices of labor and materials, so too are professional valuations generated by skilled reconstruction specialists. These valuations may be closer to what it costs to replace a home following disaster, but perhaps they too will fall short – depending on conditions.

Are insurers harmed by underinsurance in the same way that historical materials suggest that they were harmed in decades past? Historically, inadequate insurance-to-value has been thought to interfere with risk assessment because premiums have historically been calculated as if properties are fully insured-to-value. When homes are assumed to be insured-to-value, but are not, it can generate unfavorable loss ratios. To repeat the example from the beginning of this chapter, if one assumes that two homes of inherently equal replacement value are insured at the same rate (i.e. price per unit of risk), and the marginal costs of insuring those two properties are equal, if one of those homes is underinsured, it will be a less profitable investment for the insurer than its properly insured counterpart – since average losses on the underinsured home will

consume more of the premium revenue. So, under the assumption that insurers operate as if properties are fully insured-to-value, insurers still benefit from having properties on their books be adequately insured.

But to the extent that insurer risk assessment and pricing methodologies assume that homes are not insured-to-value, and insurers have a sense for how far on average policyholders depart from full insurance-to-value, insurers may compensate for widespread underinsurance by raising insurance rates. Insurers can increase their revenue vis-à-vis their losses through loss reduction, raising rates, and increasing insurable values – up to a point, since overinsurance can invite policyholder moral hazard. It is unclear whether insurers have simply adjusted their business to account for persistent underinsurance in their underwriting models, thus avoiding the consequences of underinsurance that accrued to insurers in previous periods of insurance history, or whether insurer profitability still suffers from inadequate dwelling valuation.

CHAPTER SUMMARY

The history of home insurance in the years after the Depression reveals two clear facts: first, underinsurance has been a longstanding feature of the market for dwelling insurance in the United States; second, actors within the insurance industry have repeatedly attempted to resolve underinsurance, albeit unsuccessfully, by advocating strategies intended to improve insurance-to-value.

The valuation problems that have plagued the dwelling insurance industry may persist for the foreseeable future. First, generating accurate forecasts for post-disaster

labor and supply prices in particular locales that will be affected by a disaster that has not yet happened is a difficult proposition at best. The unpredictable effects of correlated losses occurring in disaster conditions present an obstacle inhibiting insurers from supplying replacement cost coverage that actually functions to cover the costs of rebuilding homes after disaster.

Second, outdated and omitted variables inhibit insurers from providing valuations that reflect all of the relevant features of a home, as it exists at the time of loss. The general practice among insurers serving the mass market to forgo inspection and professional dwelling valuation means that some relevant features of idiosyncratic features of homes that affect rebuilding costs will not be used to calculate insurable values. Not only is this due in part to property improvements (since homeowners may not report them and since insurers do not routinely inspect properties), but a major part of this problem is likely due to the limitations of automatic dwelling algorithms: current valuation algorithms do not necessarily require enough granular detail about the home to produce an accurate blueprint for its external and internal recomposition.

The history of dwelling insurance in the United States, since the late 1930s, demonstrates that the widespread problem of underinsurance in the home insurance marketplace cannot be understood mostly as a problem of inadequate demand for insurance protection. Demand for replacement cost home insurance policies, when actual cash value was the standard offering, was exceptional, making the coverage very popular even in spite of coverage minimums and an 80 percent insurance-to-value requirement. Demand for guaranteed replacement coverage, when only capped policies

had been available prior to that time, was high, even in spite of the increased premiums that corresponded to increased insurable values. Guaranteed replacement coverage was a benefit that would only be useful for policyholders who sustained low-probability, high-consequence events. Clearly, the history of the market for core home and fire insurance reveals that consumers value coverage that provides them with the security that they will be restored to a replacement home and replacement property that is not too unlike what they had before. This chapter has shown that the demand-side explanation favored by insurance economists is far from the only contributing factor to inadequate insurance coverage.

CHAPTER 3: MISCONCEIVING MARKETS

Fire and Property Insurance: This Policy will protect your property from loss through fire, storms and cyclones. It may be cancelled without notice if you're too careless about fire. Pro-rate Insurance Co.¹

Homeowner's Insurance: Cost: Listed on your house deed. This policy protects your home from damage and theft. Rate Pro Insurance Co.²

A recent survey of homeowners, conducted by Zogby/MetLife Auto & Home and reported in *Insurance Journal*, reveals that most homeowners believe that the basic function of home insurance is to fully restore one's home and personal property in the event of a covered loss.³ More than 70 percent of survey respondents agreed with the statement that “insurance pays for the full cost to rebuild their property in the event of a major loss, such as a fire or other natural disaster.” Survey respondents also tended to believe that the financial obligations of insurers are limited only by the nature, quality, and value of the home itself: 64 percent expected that their insurance would cover any mandated building code upgrades that are necessary in order to rebuild the home.

1 Insurance policy included in the Game of Life (LIFE), undated [circa 1960s-1970s].

2 Insurance policy included in the Game of Life (LIFE), dated 1999.

3 “Homeowners Coverage Knowledge Gap Wide Among Consumers,” *Insurance Journal*, August 24, 2010, <http://www.insurancejournal.com/news/national/2010/08/24/112704.htm?>.

Similar policyholder misunderstandings are evidenced by a survey conducted in 2007 by the National Association of Insurance Commissioners (NAIC). The survey report concluded that “[a] large percentage of U.S. homeowners mistakenly believe that standard homeowners insurance protects them from a wide array of perils,” including floods, earthquakes, water line breaks, termites, mold, and several other perils that are not typically covered.⁴

Judging by the longstanding inability of insurers to establish insurable values that are sufficient to meet post-disaster rebuilding costs, as discussed in the previous chapter, the expectations that many homeowners appear to have about the function of insurance in a total loss are misplaced. Most home insurance policies do not fundamentally function to the replace the home and contents that were lost. Most home insurance policies provide for compensation for losses caused by covered perils up to a limit, which is calculated in advance of loss, that may not match actual post-disaster rebuilding costs. Since most homeowners are underinsured, claim compensation is likely to be insufficient.

In this chapter, I ask, where do their expectations about the function of the home insurance product come from?

4 National Association of Insurance Commissioners, “What Isn’t Covered by Your Homeowners Insurance? NAIC Survey Shows Lack of Awareness Among Consumers When It Comes to Their Homeowners Policies,” news release, June 4, 2007, http://www.naic.org/Releases/2007_docs/homeowners_not_covered.htm. In particular, 33 percent and 35 percent of homeowners who responded to the survey believed that flood and earthquake, respectively, are covered by standard insurance policies.

WHERE DOES KNOWLEDGE COME FROM?

A primary way individuals come to acquire knowledge is through directly relevant personal experience. Bertrand Russell referred to this form of knowledge as “knowledge by acquaintance.”⁵ Most any adult in the United States knows what to expect from a car: its functions to enable the driver to transport him or her self, passengers, and cargo from point A to point B, where the route must generally be selected from a set of pre-defined routes intended for cars to travel upon. This knowledge stems from the fact that many of us have seen cars, probably from an early age, transporting people from place to place. Our personal experience also gives us a sense of the varieties of possible car function and malfunction: we may have experienced times when the car would not start, when the seat felt hard, or when the steering was not as responsive as we might have liked. Through accumulation of directly relevant personal experience, individuals gain knowledge of the ideal function of particular products and services; they also gain knowledge of the ways that particular instantiations of products and services may fail to meet their ideal functions – and with what expected frequency.

A second route toward coming to a conception of product function is through knowledge gained via a third party account, which is what Bertrand Russell called “knowledge by description.”⁶ While an individual may never have traveled to an international destination using a travel agent, he or she might have read up on potential

5 Bertrand Russell, “Knowledge by Acquaintance and Knowledge by Description,” *Proceedings of the Aristotelian Society* 11, (1910): 108–128.

6 *Ibid.*

pitfalls to avoid when booking travel packages, on travel agent incentives and kickbacks, and on the kind of experience to expect from a group tour. Understanding the complexity pertaining to how a product works can, to some extent, substitute for personally-relevant direct experience – in terms of enabling individuals to assess what a product does and how its functional performance may vary.

What happens when individuals who are party to a transaction lack relevant knowledge? The concept of information asymmetry, as advanced in economics, is the dominant framework scholars have used to explain this situation. Theories of information asymmetry describe the behavior of market participants when one party in a transaction has more information regarding a good or service being transacted than his or her counter party. Economists often theorize that, in markets characterized by asymmetric information between buyers and sellers, markets may not proceed efficiently because low-information parties to transactions may not be able to resolve their uncertainty enough to engage in the transaction. Indeed, individuals can find it difficult to perceive the relative quality of goods or services of a given type when the features of those goods or services are not easily evaluated prior to transaction.⁷ Faced with a lack of information about the quality of a product or service, theories of

7 Carl Shapiro, “Consumer Information, Product Quality, and Seller Reputation,” *The Bell Journal of Economics* 13, no. 1 (1982): 20–35; Carl Shapiro, “Premiums for High Quality Products as Returns to Reputations,” *The Quarterly Journal of Economics* 98, no. 4 (1983): 659–679; Joel M. Podolny, “A Status-Based Model of Market Competition,” *American Journal of Sociology* 98, no. 4 (1993): 829–872; Harris H Kim, “Market Uncertainty and Socially Embedded Reputation,” *American Journal of Economics and Sociology* 68, no. 3 (2009): 679–701; Violina P. Rindova et al., “Being Good or Being Known: An Empirical Examination of the Dimensions, Antecedents, and Consequences of Organizational Reputation,” *The Academy of Management Journal* 48, no. 6 (2005): 1033–1049.

information asymmetry have often predicted that individuals will approach potential transactions involving those products and services with suspicion. For example, in the seminal work on information asymmetry by George Akerlof, potential buyers find the quality of a used car to be unobservable; in reaction to that perceived uncertainty, buyers downwardly adjust the amount they are willing to pay for a used car.⁸

Yet, despite the common assumption in information asymmetry models of market failure that individuals act with suspicion in transactions where they are lacking relevant information vis-à-vis their counter parties, there are some contexts in which individuals do not appear to exhibit the suspicion warranted by the degree of information asymmetry present in the transaction. Nonprofit nursing homes provide a good example: while individuals prefer nonprofit nursing homes over for-profit nursing homes due to perceived differences in the incentives and regulation of each organizational form, and thus the perceived differences in quality given the unobservable nature of nursing service quality, nonprofit nursing home operators can, and often do, act opportunistically without being detected.⁹ Similarly, in sectors such as long-term medical care, day care, charity, and foreign aid, consumers find it difficult to assess quality, which can leave them vulnerable to the effects of seller opportunism.¹⁰ In these contexts, information asymmetry between consumers and suppliers of goods

8 George A. Akerlof, "The Market for 'Lemons': Quality Uncertainty and the Market Mechanism," *The Quarterly Journal of Economics* 84, no. 3 (1970): 488–500.

9 Henry B. Hansmann, "The Role of Nonprofit Enterprise," *The Yale Law Journal* 89, no. 5 (1980): 835.

10 Burton Allen Weisbrod, *The Nonprofit Economy* (Cambridge, Mass.: Harvard University Press, 1988).

and services may be great, yet consumers may not be suspicious of low quality and act accordingly.

The market for home insurance is characterized by great information asymmetry between insurers and policyholders. While policyholders have often been characterized as having superior information vis-à-vis their insurers, which is a fundamental component of theories of how policyholders are enabled to act contrary to the insurer's interests (i.e. moral hazard and adverse selection), in the domain of coverage quality, insurers have far better information than policyholders. As demonstrated in the previous chapter, insurers are aware – and have been aware since at least the late 1930s – that insurance values are far below actual post-disaster replacement costs. Insurers are aware that valuations based on greater detail and on expert inspection tend to be more accurate than those based on less detail and that have not involved expert inspection – yet they do not typically arrange for expert inspection and valuation of mass market homes due to the expense. Insurers are aware that some policy features make policies much more comprehensive, and thus useful for individuals who seek comprehensive coverage, than policies without those features – though policyholders can find it difficult to understand the choices and their implications.¹¹

But despite the great information asymmetry between insurers and policyholders, policyholders approach their insurance transactions without much suspicion. As I will show in Chapter 5, policyholders tend to believe that they are fully covered by their

11 Daniel Schwarcz, “Reevaluating Standardized Insurance Policies,” *University of Chicago Law Review*, 2011; Daniel Schwarcz, “Products Liability Theory for the Judicial Regulation of Insurance Policies, A,” *William and Mary Law Review* 48, (2006): 1389.

insurance policies. How can the market for home insurance be understood, using existing approaches to conceptualizing information asymmetry?

In many examples of information asymmetry present in the economics literature, the knowledge that individuals are assumed to have regarding the product being transacted is a realistic conception of ideal product function, along with the range of possible ways that the product may depart from its ideal function. The knowledge individuals are assumed to lack is information that would enable them to evaluate how well particular instantiations of those products will perform.

But not all markets for transacted goods and services meet these conditions. First, buyers may lack personal experience with products – especially when those products have complex operations – that would enable them to form accurate conceptions of product function and the likelihood of malfunction. To the extent that personal experience is lacking among many individuals in a market, there may be limited opportunity for individuals to form knowledge even on the basis of other people's experiences. Second, relevant descriptions of the product that could permit individuals to acquire knowledge that accurately reflects product function and possible departures from ideal function may be largely inaccessible – especially to the extent that product operations are highly complex.

Home insurance in the United States is one such market. Home insurance consumers lack knowledge that would enable them to accurately conceive of the function of home insurance in total losses; they may have a sense of the ideal function of insurance, but they are missing a clear understanding of the ways that home

insurance may depart from its ideal function and the frequency with which those departures happen. The reasons for this lack of knowledge are manifold. First, large losses are highly infrequent. Policyholders are unlikely to have had personal experience with a total home loss and are unlikely to be closely tied with someone who has. For that reason, policyholders lack “acquaintance” with the process and outcomes of large loss insurance claims.

Second, most policyholders are unable to access and understand “descriptions” of home insurance that would enable them to form accurate knowledge of archetypal home insurance product function. While every policyholder has the opportunity to review the insurance policy that is in force on his or her property, homeowners find their policies difficult to evaluate. Insurance policies can appear like a maze of abstract contingencies and clauses of which they are ill-equipped to interpret.¹² As one sociologist of insurance noted:

In spite of its significance for people’s lives, insurance is a product that most buy with little appreciation. They spend large sums of money to purchase something they have little knowledge about and therefore cannot adequately assess with respect to price and features. The only material thing they obtain at the outset is a piece of paper that they rarely read and even more rarely understand. They do understand that embedded in the contract is a promise to pay if something goes wrong. However, the details are typically obscure . . .¹³

Insurance regulators provide limited “description” of how home insurance typically functions for large losses: state departments of insurance do not routinely make

12 Schwarcz, “Products Liability Theory for the Judicial Regulation of Insurance Policies, A”; Schwarcz, “Reevaluating Standardized Insurance Policies.”

13 Richard Victor Ericson, Aaron Doyle, and Dean Barry, *Insurance as Governance* (University of Toronto Press, 2003). p.4.

available information about the extent to which home insurance coverage has been sufficient to cover large losses. At least in California, market conduct exams report the number of complaints the department of insurance receives in a year by the total number of active policies in that year – a statistic that makes the complaint ratio poorly informative of large loss outcomes.¹⁴

Third, homeowners tend to lack knowledge of post-disaster reconstruction costs. Policyholders cannot easily access data that insurers collect, in the course of adjusting claims, on the construction cost information for previous disaster-destroyed homes. And even if they could, it takes expertise to understand the potential construction costs of particular homes under post-disaster economic conditions. Homeowners are essentially operating in the dark when it comes to pre-loss valuation of reconstruction costs; a homeowner might remember how much he or she paid for a home and possibly its current estimated market value, but these facts are not necessarily useful in estimating post-disaster reconstruction costs.

The vast majority of homeowners have little relevant knowledge – obtained through acquaintance and through description – that could inform their understandings of the performance of home insurance after total disaster loss. Indeed, policyholders tend not

14 Moreover, complaint statistics are not necessarily a reliable indicator of large loss compensation sufficiency; it is likely that only a subset of policyholders with insufficient coverage available under their policies actually report their situations to the Department of Insurance. Homeowners may not always think to report inadequate policy limits to their state's Department of Insurance, perhaps believing that their dissatisfaction with the contract they signed with the company is beyond the department's jurisdiction. Also, insurers are made aware of complainants; large loss claimants may be concerned that making a report could affect the handling of their open claim or jeopardize their future insurance coverage.

to understand their insurance policies¹⁵ and they tend not to understand insurance coverage in general.¹⁶ But despite their lack of acquaintance with and description of home insurance operation in large loss, policyholders tend to expect that their home insurance policies would function to restore their homes if it were destroyed in disaster. What might explain policyholder misconceptions of home insurance product function?

EXPERIENTIAL MISMATCH

Cultural sociologists have recognized that social actors interpret information according to lenses that are constructed from the history of their experiences. Histories of experience – and the cultural, cognitive, and institutional transmission of experience – produce schemata, concepts, taken-for-granted understandings, and dispositions that actors bring into new contexts.¹⁷ These perceptual lenses, in most cases, help actors to form reasonable expectations of new contexts.¹⁸ In some circumstances, however, the

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- 15 Henry K. Duke, “Insurance Ethics—From the Inside Looking Out,” *The ANNALS of the American Academy of Political and Social Science* 363, no. 1 (1966): 102 – 107; Ericson, Doyle, and Barry, *Insurance as Governance*.
 - 16 Donna J Popow, *Claim Handling Principles and Practices* (Malvern, PA: American Institute for Chartered Property Casualty Underwriters/Insurance Institute of America, 2006).
 - 17 Paul DiMaggio, “Culture and Cognition,” *Annual Review of Sociology* 23, (1997): 263–287; Peter L. Berger and Thomas Luckmann, *The Social Construction of Reality: a Treatise in the Sociology of Knowledge* (Doubleday, 1967); Eviatar Zerubavel, *Social Mindscapes: An Invitation to Cognitive Sociology* (Harvard University Press, 1999).
 - 18 Harold Garfinkel, *Studies in Ethnomethodology* (Wiley-Blackwell, 1967); Berger and Luckmann, *The Social Construction of Reality*; Mustafa Emirbayer and Ann Mische, “What Is Agency?,” *American Journal of Sociology* 103, no. 4 (1998): 962–1023; Pierre Bourdieu, *The Social Structures of the Economy* (Polity, 2005).

prior experiences individuals have had can mislead them.

According to Pierre Bourdieu, individual and collective experience is accreted into a structure called the “habitus.” Habitus is the set of understandings, schemas, preferences, and tastes through which agents make sense of a field, their position, and potentialities of acting within it.¹⁹ These understandings, schemas, preferences, and tastes come through sensory experience: a mechanism he calls “embodiment.” Since the conditions under which the habitus is generated (the past) are oftentimes similar to the present conditions actors confront in economic life, the habitus often generates dispositions that are well-suited to present conditions. As such, actors are not beset by uncertainty in regards to their perceptions of a field; rather, they are able to immediately form reasonable expectations in most situations.²⁰

Yet, Bourdieu suggests that there may be occasions when the conditions of the habitus' actualization do not match present field conditions. He gives the example of old people who cling to dispositions forged in a world they once knew but that has since changed. He also gives the example of subproletarians whose subordinate class position leave them with a habitus that is ill-suited to guide productive participation in fields dominated by middle and upper class consumption practices. He contends that this problem, in the former case, can be understood as a “lag in adaptation” and in the latter case, as a “counter-adaptive mismatch.”²¹ Essentially, the durable lens individuals use to make sense of the world, which has given them great success in the past, may be wholly

19 Pierre Bourdieu, *The Logic of Practice* (Stanford University Press, 1990).

20 Bourdieu, *The Social Structures of the Economy*.

21 *Ibid.*

ill-equipped to deal with radically new situations.

The role of individual experience in guiding understandings and behavior in new situations – and the potential for mismatch between past experiences and present conditions – is also a focus of work by Harold Garfinkel. Harold Garfinkel contended that actors tend to assimilate new experiences into old experiences by means of an “enveloping” procedure: differences or faulty “fits” between emergent situations and simplifying idealizations, which were formed through previous experience, are smoothed over – a phenomena he calls the “et cetera clause.”²² When confronted with new information, historical categories and definitions take primacy over new information. The consequence of the primacy of prior experience is that individuals can confront circumstances where received wisdom, which may be supported by routinized cognition and action, is poorly aligned with current conditions.²³ In sum, the same preexisting categories that help actors to make sense of their circumstances can blind individuals to the idiosyncrasies of new situations and the responses best suited to them.

Applied to economic transactions, Bourdieu's concept of habitus and Garfinkel's concept of the “et cetera clause” both suggest the possibility that individuals may misconceive of product function on the basis of their prior experiences. When people

22 Garfinkel, *Studies in Ethnomethodology*.

23 Walter W. Powell and Jeanette A. Colyvas, “Microfoundations of Institutional Theory,” in *The SAGE Handbook of Organizational Institutionalism*, ed. by Royston Greenwood et al. (SAGE, 2008); Karl E. Weick, “The Collapse of Sensemaking in Organizations: The Mann Gulch Disaster,” *Administrative Science Quarterly* 38, no. 4 (1993): 628–652; Scott A. Snook, *Friendly Fire: The Accidental Shootdown of U.S. Black Hawks over Northern Iraq* (Princeton University Press, 2002); Javier Auyero and Debora Swistun, “The Social Production of Toxic Uncertainty,” *American Sociological Review* 73, no. 3 (2008): 357–379.

gain knowledge from prior personal experience in a field of transaction, but they encounter new situations in that field of transaction that seem similar but actually differ in important ways from situations they have encountered before, their knowledge can lead them astray.

Individuals may have misplaced expectations about the typical function of home insurance in large losses, in part, due to their prior experiences. Small homeowner losses and auto losses are a much more frequent occurrence among policyholders than total home losses. Even if an individual has not personally had a pipe break, a tree fall on the roof, an auto accident, or a kitchen fire, it is likely that he or she knows someone who has. To the extent that individuals find that insurers tend to fully compensate them for small auto and home losses (aside from the stated deductible), they may expect insurers to do the same after large losses. Consider: if most policyholders have never experienced a large home loss, if they have never been involved in post-disaster home reconstruction, and if they have never acquired the specific legal knowledge that would help them understand the terms and contingencies of their home insurance policies, what reason would they have to believe that large losses would work any differently than small losses?

BEST CASE THINKING

Misplaced expectations may also be promoted by the interaction between cognition and cultural communications: cognitive/cultural sociologists argue that the conceptions individuals have of the world can be largely explained by processes inherent to how the

mind works in interaction with socially and culturally constructed features of the environment.²⁴ One particular concept, known as “best case thinking,” holds that the misconceptions individuals have about future states of the world can often be explained as the susceptibility of individuals to “positive asymmetry,” which is a “powerful convention of quality evaluation” that “foregrounds or underscores only the best characteristics and potentials of people, places, objects, and events.”²⁵ Similarly, other scholarship has concluded that individuals are biased against considering low-probability, high-consequence events (“possibilistic thinking”) and instead tend to perceive only probable outcomes (“probabilistic thinking”).²⁶ These perspectives predict that individuals in many contexts will have simplified, even singular, expectations of future states of the world such that their views prioritize images of best quality or images of the most probable outcomes.

Cerulo notes that cultural practices promote best-case thinking by acting to keep negative cases vaguely defined (clouding), to shield negative cases from view (eclipsing), and to re-frame negative cases as positive ones (recasting).²⁷ One means by which clouding, eclipsing, and recasting can happen is through “framing.” “Framing” describes the way in which potential issues of public concern are communicated,

24 DiMaggio, “Culture and Cognition”; Karen A. Cerulo, “Mining the Intersections of Cognitive Sociology and Neuroscience,” *Poetics* 38, no. 2 (2010): 115–132; Karen A. Cerulo, *Never Saw It Coming: Cultural Challenges to Envisioning the Worst* (University of Chicago Press, 2006); Zerubavel, *Social Mindscapes*.

25 Cerulo, *Never Saw It Coming*.

26 Lee Ben Clarke, *Worst Cases: Terror and Catastrophe in the Popular Imagination* (University of Chicago Press, 2006).

27 Cerulo, *Never Saw It Coming*.

through symbols and imagery, such that certain aspects of the issue are rendered more salient than others.²⁸ Frames can be powerful: as previous research has shown, frames that are intentionally or unintentionally promoted by powerful actors can be so strong that issues of apparent public interest fail to emerge as issues at all.²⁹

Best-case and probabilistic thinking frameworks portend that individuals will tend to expect their transactions to turn out according to the most optimistic or most probable outcomes, since the full range of possibilities are obscured from view by processes inherent in cognition and ubiquitous in culture. In contrast with perspectives in economics that hold that individuals perceive uncertainty, the “best case thinking” framework predicts that individuals will not necessarily feel uncertain in transaction contexts where they lack experience and knowledge. They may feel that they fully understand their circumstances even if those understandings actually prioritize singular images of the “best case.”

In light of the fact that underinsurance has been a pervasive feature of the home insurance market in every decade since the Depression, the tendency of homeowners to expect that the function of their insurance is to fully restore their homes after disaster

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- 28 Erving Goffman, *Frame Analysis: An Essay on the Organization of Experience* (Penguin Books, 1974); David A. Snow et al., “Frame Alignment Processes, Micromobilization, and Movement Participation,” *American Sociological Review* 51, no. 4 (1986): 464–481; William A. Gamson and Andre Modigliani, “Media Discourse and Public Opinion on Nuclear Power: A Constructionist Approach,” *American Journal of Sociology* 95, no. 1 (1989): 1–37.
- 29 Steven Lukes, *Power: a Radical View* (Palgrave Macmillan, 2005); Matthew A. Crenson, *The Un-politics of Air Pollution: a Study of Non-decisionmaking in the Cities* (Johns Hopkins Press, 1971); John Gaventa, *Power and Powerlessness: Quiescence and Rebellion in an Appalachian Valley* (University of Illinois Press, 1982); John W. Kingdon, *Agendas, Alternatives and Public Policies* (Boston: Little, Brown, 1984).

can be understood as a “best case” bias. While it may be true that some insurers offer better coverage than others, such as the very small percentage of insurers who make guaranteed replacement policies available to a highly select group of policyholders, the historical record suggests that after disaster it is all too commonly the case that policyholders have insufficient compensation under their policies to rebuild.

In the market for home insurance, how might cultural communications tend to elide, from policyholder consideration, the post-loss outcome of having insufficient compensation to rebuild? The most visible contribution may be the way that insurers frame the insurance transaction in advertisements. The slogans and commercials of major insurance companies, such as, “like a good neighbor, State Farm is there,” and “you’re in good hands with Allstate,” frame insurers as a trustworthy, dependable source of expertise and assistance in a homeowner’s direst hour of need. In some television commercials, for instance, a pile of rubble reassembles itself into the home that was lost in the presence of a beaming family and insurance company representative; or, an insurance representative and a disaster survivor embrace amidst debris, as the survivor looks overwhelmed with gratitude and relief.³⁰ Insurers seem like

30 As a case in point, take a 2009 State Farm commercial that aired on The Weather Channel: The song “O-o-h Child” by the Five Stairsteps, plays in the background. The lyrics include, “Ooh-oo, child, things are gonna get easier, Ooh-oo child, things’ll be brighter. Some day, yeah. We’ll put it together and get it all done....” The shot is of a devastated family, standing amidst the rubble of a destroyed home. They poke through the mess, presumably looking for recognizable objects that they can recover. The scene pans closer, and we see them looking, with heavy looks and teary eyes, through a tattered photo album. The grief is palpable. A transition occurs: the shot changes to a State Farm representative who is on the scene, wearing a bright red polo shirt, which stands in stark contrast to the dreary grayness of the debris. The representative hugs one of the family members, and hands over a warm beverage. An expression of deep relief and hope spreads over the family as they

the Red Cross or the Salvation Army: heroes of dependability, support, and generosity that function to put people back together again, and quickly, after their entire lives have fallen apart.³¹ The account insurance advertisements provide of home insurance product function is reassuring: you will be okay after large loss.

While the content of insurance advertisements may support homeowner misconceptions of how home insurance functions after total loss, they are certainly not the only influence. In Chapter 5, I will explore how other factors, including interactions between policyholders and agents, consumer experience with partial losses, and lay understandings of the home insurance contract also buttress policyholder misplaced expectations.

MARKET MISCONCEPTIONS

Individuals who participate in the market for home insurance tend not to expect that insurance often functions to pay out a limited and – if a long history of inadequate insurance-to-value in the U.S. home insurance market is any guide – likely inadequate amount of compensation to rebuild. Instead, policyholders tend to believe that home insurance typically functions to restore whole homes. In the home insurance market, there is a gap between the actual function of home insurance and its expected function.

stand with the agent. The music swells.

31 Indeed, this tendency of insurers to publicly present themselves as protectors of widows, orphans, the bereaved, and the devastated has deep roots in the history of insurance; see Viviana A. Rotman Zelizer, *Morals and Markets: The Development of Life Insurance in the United States* (Transaction Publishers, 1979). The cultural meaning of insurance will be discussed in length in a later chapter, because it is so significant for explaining how people engage in the claims process.

Most contemporary sociological theory and research neglects potential differences between the socially shared understanding of a product and its actual function. In sociology, product and service understandings have been mobilized in theories that show how the acquisition, display, and exchange of objects with meanings bear upon status,³² class distinctions,³³ and social relationships.³⁴ In organizational sociology, the meanings of goods and services are conceptualized as both products of organized economic activity and features of the organizational environment with which organizations must contend.³⁵ Rarely is a distinction made in contemporary sociology between accurate or inaccurate knowledge of products or services: social relations, social structure, and market organization are explained in terms of how people act in accordance with beliefs and in so doing, produce, reproduce, and iterate the institutional environment. Essentially, there is an assumed tight coupling between what people believe products to be, and how they actually function for people, since the actions people take on the basis of these understandings can define what products are.³⁶

32 Thorstein Veblen, *The Theory of the Leisure Class: An Economic Study of Institutions* (B.W. Huebsch, 1912).

33 Pierre Bourdieu, *Distinction: a Social Critique of the Judgement of Taste* (Harvard University Press, 1984).

34 Viviana A. Rotman Zelizer, *The Purchase of Intimacy* (Princeton University Press, 2007).

35 Zelizer, *Morals and Markets*; Cheri Shun-ching Chan, "Invigorating the Content in Social Embeddedness: An Ethnography of Life Insurance Transactions in China," *American Journal of Sociology* 115, no. 3 (2009): 712–754.

36 One notable exception to the notion of a tight coupling between understandings and actuality is Bourdieu's notion of class-based meanings of products. In Bourdieu's view, subordinate classes reproduce their subordinate position in the class hierarchy through aspirational consumption on the basis of misconceptions about the status value of goods. Their consumption of goods that seem to them to define elite

Yet, there is precedent in sociology for theorizing about other kinds of market misconceptions, besides product misconceptions. The notion of a dichotomy between (incorrect) knowledge and actual complex reality, is a central tenet of critical theory. As argued famously in the work of Karl Marx,³⁷ later through Antonio Gramsci's concept of "hegemony,"³⁸ and still later through neo-Marxist thought, dominant classes supply a lens through which subordinate classes perceive their economic and political realities as acceptable and natural even though they do not benefit by the material conditions of those realities. Misrecognition of interests by subordinate groups is the outcome of the exercise of power, which can be exercised intentionally or unintentionally.³⁹ Under certain conditions, taken-for-granted assumptions and norms, emergent in institutional environments, can inhibit actors from recognizing their interests and pursuing them effectively.⁴⁰

Previous contributions to sociological theory also suggests that individuals may misconceive of their transaction partners. Many transactions occur between individuals and organizations. Corporations are similar to individuals inasmuch as they are endowed with legal personhood, which entitles them to treatment under law as equal to

consumption actually, to elites, signifies their membership in a lower class.

- 37 Karl Marx and Friedrich Engels, *The German Ideology* (International Publishers Co, 1970); Karl Marx, *Capital: a Critique of Political Economy* (Modern Library, 1906).
- 38 Antonio Gramsci, *Selections from the Prison Notebooks of Antonio Gramsci* (Electric Book Co., 2001).
- 39 Lukes, *Power*; Gaventa, *Power and Powerlessness*; Crenson, *The Un-politics of Air Pollution*.
- 40 Paul DiMaggio, "Interest and Agency in Institutional Theory," in *Institutional Patterns and Organizations: Culture and Environment*, ed. by Lynne G. Zucker (Ballinger Pub. Co., 1988).

natural persons (but without constraints imposed by natural mortality).⁴¹ Yet, corporations are very different from persons. The prototypical formal organization has been variously understood as a nexus of contracts, as a complex role structure, and as an environment for individual action.⁴² Corporations are subject to different kinds of pressures, engage in different practices, and operate differently than individuals. Yet, important aspects of organizational complexity may be lost on individuals. Individuals may engage in corporate transactions as if corporations were persons.⁴³ And when they misconceive of corporate actors as having a propensity to act as individuals might – such that individuals expect corporate actors and their agents to follow the “golden rule” of doing unto others as you would have them do unto you – individuals can so poorly navigate their person-organization transactions that they receive less benefit from those transactions than they might otherwise.⁴⁴

Individuals can also misconceive of economic conditions. In Robert K. Merton's concept of the self-fulfilling prophecy, individuals can act upon misconceptions of economic conditions (or non-economic conditions as the case may be) with the outcome

41 Max Weber, *Economy and Society: An Outline of Interpretive Sociology* (University of California Press, 1978); Philip Selznick, Philippe Nonet, and Howard M. Vollmer, *Law, Society, and Industrial Justice* (Russell Sage Foundation, 1969); James Samuel Coleman, *Power and the Structure of Society* (Norton, 1973).

42 Brayden G. King, Teppo Felin, and David A. Whetten, “Perspective—Finding the Organization in Organizational Theory: A Meta-Theory of the Organization as a Social Actor,” *Organization Science*, 2009.

43 Michael C. Jensen and William H. Meckling, “Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure,” *Journal of Financial Economics* 3, no. 4 (1976): 305–360.

44 Coleman, *Power and the Structure of Society*.

that the erroneous belief comes true.⁴⁵ The example Merton gives is a run on the bank that, when taken on the basis of misconceptions about the solvency of the bank, can actually produce the originally misunderstood condition of insolvency. Merton's self-fulfilling prophecy is an instance of a falsely negative market misconception. Market misconceptions of economic conditions can also be falsely positive. The “proxy signs” that were taken-for-granted as indicating the health of the economy, which became poor proxies with the entry of non-banks into arenas once limited only to banks, supported falsely positive understandings of the economic environment prior to recent worldwide financial crises.⁴⁶ Measures that commensurate and simplify complex qualities can hide uncertainty lurking in the nuanced details.⁴⁷

In all these examples, mental models of the marketplace may fail to fully represent the complexity of how the marketplace works and the possible transaction outcomes that could occur. Individuals may misconceive of their interests, may misconceive of corporate transaction partners, and may misconceive of economic conditions more generally. Indeed, as the case of home insurance suggests, individuals may also tend to misconceive of the function of goods and services.

45 Robert K. Merton, “The Self-Fulfilling Prophecy,” *The Antioch Review* 8, no. 2 (1948): 193–210.

46 Richard Swedberg, “The Structure of Confidence and the Collapse of Lehman Brothers,” *Research in the Sociology of Organizations*, no. 30 Part A (2010): 71–114.

47 Bruce G. Carruthers and Barry Cohen, “Calculability and Trust: Credit Rating in Nineteenth-century America” (presented paper, *Transitions to Modernity Colloquium*, MacMillan Center, Yale University, September 20, 2010).

UNCERTAINTY AND “FALSE CERTAINTY”

Individuals tend to misconceive of the typical function of insurance after large loss. As such, individuals can be said to have “false certainty” in the function of home insurance. They are “certain” inasmuch as their beliefs about the function of home insurance tend to be singular: home insurance will restore their home after loss. Their certainty is “false” because these beliefs do not reflect actual conditions: given high rates of underinsurance, home insurance does not typically fully restore homes after loss.

As I suggested earlier, policyholder “false certainty” in the function of home insurance may be supported by features of the home insurance market: sales routines, renewal routines, previous (small) claims experiences, policy language, and cultural communications. As such, “false certainty” complicates existing perspectives in sociology that have generally credited market institutions with reducing uncertainty among market participants to positive, rather than negative, effect.

Uncertainty, generally defined, describes the condition under which actors do not know what to expect because they are unable to calculate probabilities for potential outcomes.⁴⁸ In markets and market transactions, uncertainty can be problematic inasmuch as it interferes with the ability of economic actors to coordinate action.⁴⁹

48 Frank Hyneman Knight, *Risk, Uncertainty and Profit* (Houghton Mifflin Company, 1921).

49 Jens Beckert, “What Is Sociological About Economic Sociology? Uncertainty and the Embeddedness of Economic Action,” *Theory and Society* 25, no. 6 (1996): 803–840; Jens Beckert, “The Social Order of Markets,” *Theory and Society* 38, no. 3 (2009): 245–269.

Market actors can be uncertain about whether a product is legitimate;⁵⁰ how to value a product;⁵¹ how to evaluate the quality of product instantiations;⁵² and how other market actors will act in the future.⁵³ Uncertainty can undermine actor confidence that transactions will be profitable, and thus beneficial.⁵⁴ The potential consequences of uncertainty is that transactions are inhibited, preventing new markets from emerging and saddling established markets with the inability of producers to reap returns from producing quality goods and services.⁵⁵

Economic sociologists have emphasized how the characteristics of economic fields and the constitution of actors within those fields function to reduce uncertainty for market participants. Local understandings, conventions, and formal and informal rules guide interaction, define products, and produce stability for actors – within a larger context of government, laws, and broader cultural understandings that support market

50 Zelizer, *Morals and Markets*.

51 Patrik Aspers, “Knowledge and Valuation in Markets,” *Theory and Society* 38, no. 2 (2008): 111–131; Olav Velthuis, “Symbolic Meanings of Prices: Constructing the Value of Contemporary Art in Amsterdam and New York Galleries,” *Theory and Society* 32, no. 2 (2003): 181–215.

52 Podolny, “A Status-Based Model of Market Competition”; Kieran Healy, “The Emergence of HIV in the U.S. Blood Supply: Organizations, Obligations, and the Management of Uncertainty,” *Theory and Society* 28, no. 4 (1999): 529–558; Tamar Yogeve, “The Social Construction of Quality: Status Dynamics in the Market for Contemporary Art,” *Socio-Economic Review* 8, no. 3 (2010): 511–536.

53 Alya Guseva and Akos Rona-Tas, “Uncertainty, Risk, and Trust: Russian and American Credit Card Markets Compared,” *American Sociological Review* 66, no. 5 (2001): 623–646.

54 Nicole Woolsey Biggart and Thomas D. Beamish, “The Economic Sociology of Conventions: Habit, Custom, Practice, and Routine in Market Order,” *Annual Review of Sociology* 29, (2003): 443–464.

55 Akerlof, “The Market for ‘Lemons’.”

activity.⁵⁶ Other means by which uncertainty is reduced include status and reputation,⁵⁷ standards or rankings;⁵⁸ third party affiliations;⁵⁹ formal transaction governance;⁶⁰ and informal governance through norms and personal relationships.⁶¹ Actors engage in ongoing efforts to render situations comprehensible, where achievement of

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- 56 Neil Fligstein and Luke Dauter, “The Sociology of Markets,” *Annual Review of Sociology* 33, no. 1 (August 2007): 105–128.
- 57 Joel M. Podolny, *Status Signals: A Sociological Study of Market Competition* (Princeton University Press, 2008); Podolny, “A Status-Based Model of Market Competition”; Marvin Washington and Edward J. Zajac, “Status Evolution and Competition: Theory and Evidence,” *The Academy of Management Journal* 48, no. 2 (2005): 282–296; Peter Kollock, “The Emergence of Exchange Structures: An Experimental Study of Uncertainty, Commitment, and Trust,” *American Journal of Sociology* 100, no. 2 (1994): 313–345; Kim, “Market Uncertainty and Socially Embedded Reputation.”
- 58 Hayagreeva Rao, “The Social Construction of Reputation: Certification Contests, Legitimation, and the Survival of Organizations in the American Automobile Industry: 1895–1912,” *Strategic Management Journal* 15, no. S1 (1994): 29–44; Stefano Ponte and Peter Gibbon, “Quality Standards, Conventions and the Governance of Global Value Chains,” *Economy and Society* 34, no. 1 (2005): 1–31; James B. Wade et al., “The Burden of Celebrity: The Impact of CEO Certification Contests on CEO Pay and Performance,” *The Academy of Management Journal* ARCHIVE 49, no. 4 (2006): 643–660; Wendy Nelson Espeland and Michael Sauder, “Rankings and Reactivity: How Public Measures Recreate Social Worlds,” *American Journal of Sociology* 113, no. 1 (2007): 1–40.
- 59 Rindova et al., “Being Good or Being Known”; Ezra W. Zuckerman, “The Categorical Imperative: Securities Analysts and the Illegitimacy Discount,” *American Journal of Sociology* 104, no. 5 (1999): 1398–1438.
- 60 Karl E. Weick, *The Social Psychology of Organizing* (Random House, 1979); Charles W. Smith, *Auctions: The Social Construction of Value* (University of California Press, 1990); Oliver E. Williamson, “Transaction-Cost Economics: The Governance of Contractual Relations,” *Journal of Law and Economics* 22, no. 2 (1979): 233–261.
- 61 Alejandro Portes and Julia Sensenbrenner, “Embeddedness and Immigration: Notes on the Social Determinants of Economic Action,” *American Journal of Sociology* 98, no. 6 (1993): 1320–1350; Paul DiMaggio and Hugh Louch, “Socially Embedded

comprehensibility is contingent and dynamic.⁶²

As the case of insurance demonstrates, markets need not be characterized only by problems of uncertainty. An under-appreciated potential problem in markets is the incidence of widespread market misconceptions about product function. Certainly, market institutions are the grease in the economic machinery that makes transaction, and the structures that support transaction, possible – inasmuch as market institutions resolve latent uncertainty that could inhibit coordinated action. Yet, the outcome of reduced uncertainty is not necessarily *accurate* certainty among market actors. Instead of reducing uncertainty to a state of better information and accurate knowledge among home insurance consumers, institutions in the field of home insurance contribute to a state of “false certainty” among consumers in the likely function of home insurance in large losses.

CHAPTER SUMMARY

The chapter has suggested that this “false certainty” about products may fundamentally stem – as do other understandings – from past experiences of individuals in a culturally and socially constructed context. In markets where a large fraction of the buying population lacks deep and relevant experience with a product, it introduces the

Consumer Transactions: For What Kinds of Purchases Do People Most Often Use Networks?,” *American Sociological Review* 63, no. 5 (1998): 619–637; Brian Uzzi, “Social Structure and Competition in Interfirm Networks: The Paradox of Embeddedness,” *Administrative Science Quarterly* 42, no. 1 (1997): 35–67; Brent Simpson and Tucker McGrimmon, “Trust and Embedded Markets: A Multi-method Investigation of Consumer Transactions,” *Social Networks* 30, no. 1 (2008): 1–15.

62 Powell and Colyvas, “Microfoundations of Institutional Theory.”

possibility of a widespread mismatch between what the product is understood to be and its actual operations. Market institutions may promote the “best case” function of a product among market participants and suppress conception of alternative possibilities for what a product is and what it functions to do.

In this chapter, I have theorized that home insurance is characterized by great information asymmetry, along with a general lack of suspicion among policyholders (i.e. the low-information party) because policyholders do not understand home insurance accurately enough to recognize the potential for variable functional performance (i.e. quality). This extends the breadth of models of information asymmetry in markets, which have, on balance, tended to focus primarily on contexts in which actors know the categories of information they are uncertain about. Indeed, just because an individual may lack experience or knowledge that is relevant to transaction does not mean that she will recognize the limits of her capacity to evaluate the product and be uncertain in her expectations regarding the potential for function and malfunction.

In the chapters to follow, I will return to the suggestions I have made – on theoretical grounds – about the institutional features of the market for home insurance that may lead individuals to conclude that they have adequate coverage. Using ethnographic fieldwork, I will discuss the bases upon which individuals who had lost their homes in the San Diego wildfires of 2003 and 2007 had concluded, prior to loss, that their insurance would function to fully restore them. To provide the necessary context for that discussion, we begin with the story of two San Diego wildfires.

CHAPTER 4: A TALE OF TWO FIRES

In October 2003, high temperatures, low humidity, and Santa Ana winds set the stage for one of California's most destructive firestorms, second only to the fire that swept the Oakland and Berkeley Hills in 1991. The fire was actually multiple fires, which were burning in multiple locations all around the state. Ravaging Southern California from Los Angeles to the Mexican border, collectively the fires destroyed 3,631 homes and claimed 24 lives statewide.¹ San Diego bore the brunt of the destruction. A total of 22 deaths and 2,454 destroyed homes were located in San Diego County.² A state of emergency was declared in California on October 27, 2003 by President George W. Bush.³

The San Diego wildfires – named the Cedar, Otay, and Paradise fires – started in the easternmost rural regions of San Diego County. The most destructive of the three, the Cedar fire, began at 5:37 pm on October 24, 2003 when a lost hunter fired a signal flare

- 1 William Campbell, Governor's Blue Ribbon Fire Commission: Report to the Governor (Office of the Governor, State of California, 2004).
- 2 The San Diego Foundation indicates that these numbers are "based on best available information as of June 30, 2004." After-the-Fire Report (San Diego Foundation, 2003).
- 3 California Wildfires, Major Disaster Declared October 27, 2003 (DR-1498), website, <http://www.fema.gov/news/eventcounties.fema?id=2543>. (Last accessed June 20, 2012).

that set a local forest aflame. Once established, it swiftly moved westward with unimaginable speed and power, burning two acres per second.⁴

Homes burned in upscale suburban and rural bedroom communities, in mountain towns, in the exurbs, and on American Indian reservations.⁵ Of the nearly 2500 homes that were destroyed, 330 of them were within the limits of the City of San Diego or the City of Poway. The remaining 2,124 homes were located in the large, unincorporated part of the County, which includes vast tracts of rural land and a number of communities populated by individuals with diverse characteristics, from professionals who enjoy a country feel, to middle and low income residents who find the eastern parts of San Diego more affordable.⁶

Immediately, grassroots recovery efforts to aid households emerged in each of the fire-affected communities. Community organizers built recovery activities upon the back of preexisting local institutions, including churches, small businesses, homeowners associations, and civic clubs.⁷ They collected donations, distributed grants and gifts, provided counseling, circulated information related to rebuilding and insurance, and put families in touch with case managers with the American Red Cross, the Salvation Army and other charitable organizations. Each community opened a type of center where fire-affected families could gather for meetings and to obtain information and resources

4 Walt Ekard and Harold W. Tuck, *San Diego County After Action Report, Firestorms 2003* (Office of Emergency Services, County of San Diego, 2003).

5 *Community Needs Assessment Report, After-the-Fire Fund* (San Diego Foundation, 2003).

6 *Ibid.*

7 *Ibid.*

from FEMA, SBA, and charitable organizations.⁸ In the immediate aftermath, insurance companies parked mobile offices nearby in order to begin handling claims.

Six months after the fire, recovery centers serving vulnerable, low and middle income unincorporated areas were integrated into a common organization, called the San Diego Firestorm Community Recovery Team (SDFCRT). Established under the auspices of the San Diego Foundation, the SDFCRT was intended to "coordinate emotional, physical, financial and spiritual resources to help rebuild the homes and resources affected by the San Diego wildfires of October 2003."⁹ Four SDFCRT centers served Ramona, Lakeside, Crest, and Julian. The more affluent communities of Scripps Ranch, Tierrasanta, Poway, and Alpine were independent of SDFCRT; community organizers in those areas offered support to fire survivors through their own grassroots recovery organizations and civic associations.¹⁰

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- 8 The City of San Diego Manager's Report: Initial 30-Day Post-Fire Overview, Memo from the Office of Mayor Dick Murphy, October 28, 2003. See also *Fire Stories: A Supplement "from Chaos to Community"* (Community Partners, 2005).
- 9 Community Needs Assessment Report, After-the-Fire Fund.
- 10 Ibid. Of the 330 homes that were lost in the three incorporated areas – Scripps Ranch, Tierrasanta, and Poway – 85% were in Scripps Ranch. Scripps Ranch recovery efforts were layered on top of existing social, service, and neighborhood organizations. The Scripps Ranch Civic Association (SCRA) sought donations on behalf of fire survivors, organized events, and published a fire edition of their monthly newsletter which updated fire survivors about resources, discounts, codes and laws. Poway residents were aided by the Rotary club, which helped 60 of the 65 families that were affected by the firestorm. In Tierrasanta, homeowner associations serving the 10 families that lost homes helped guide the families through the rebuilding process. Alpine residents who wanted assistance could obtain it either from the Crest and Lakeside centers, and also from an independent grassroots center in Peutz Valley. Based on conversations with two informants that were active in the 2003 recovery efforts, the reason the affluent communities did not participate in SDFCRT was mutual: in part because the funding objective of the San Diego Foundation was to serve the neediest families, and in part because leaders in the

As months passed after the fire, organizers in all the communities noticed that many fire-affected families appeared to face insurance problems; the most serious problem families seemed to face was inadequate compensation to rebuild. To support fire survivors with their insurance issues, organizers in almost all the fire-affected areas established insurance-related programming. Often, programs took the form of support groups consisting of people who shared the same insurance company, where participants could compare notes, share stories, and offer support to one another.¹¹ In addition, some of the centers hosted regular workshops led by Community Assisting Recovery efforts (CARE), an insurance policyholder advocacy nonprofit organization that has helped insurance policyholders with claims since the Northridge Earthquake.¹² CARE workshops offered loss survivors insurance policy education, legal education, loss valuation review, and claims strategy advice. Outside of seminars, CARE supplied information to the California Department of Insurance about the insurance problems of fire-affected families, especially the inadequacy of policy limits to replace and rebuild homes.

Residents of Scripps Ranch, who had, for the most part, independently coordinated their own programs and recovery efforts, were also politically vocal about the insurance

more affluent communities preferred to manage community recovery efforts on their own. The San Diego Foundation did provide some assistance to the areas that chose to go alone: the Foundation granted the Scripps Ranch Civic Association \$50,000 to assist homeowners with debris removal and fire prevention.

11 Jeanette Steele, "Weekly talks set on insurance issues," *The San Diego Union-Tribune*, April 4, 2004: B-2.

12 Jeanette Steele, "Crusader provides CARE to fire victims," *The San Diego Union-Tribune*, January 18, 2004: B-1.

problems of disaster-affected homeowners. Organizers called private meetings with California Insurance Commissioner John Garamendi, wrote letters to the Department of Insurance, and eventually testified before the State Senate on the need for greater policyholder protections.

Both CDI and the California State Senate Insurance Committee initiated a series of insurance-related public hearings around the state.¹³ Held about one year after the fire, the hearings were dominated by three main issues: first, inadequate policy limits for rebuilding (“underinsurance”), inadequate time limits for collecting temporary living expenses, and burdensome personal property documentation requirements imposed by some insurers.¹⁴ By far the most serious problem seemed to be underinsurance. According to the report, “[m]any homeowners were simply underinsured and were not aware of it, despite repeated assurances from agents or companies that they had all the insurance needed to rebuild should they lose their home.”¹⁵

The contention that underinsurance was a widespread problem was not limited only to regulators, consumer advocates, and affected homeowners. Members of the insurance industry also recognized underinsurance as problematic. An Insurance Information Network of California press release warned consumers that “thousands of homeowners have found themselves underinsured when a fire or earthquake damages

13 This move was not unprecedented. The CDI had, in prior years, held hearings that prompted the reopening of long-closed Northridge Earthquake claims, which required companies to reconsider and re-evaluate damages on grounds that insurers had not initially honored the warranties they had made to insurance consumers.

14 2003-2004 Legislative Summary, California Senate Committee on Insurance.

15 2003-2004 Legislative Summary, California Senate Committee on Insurance.

their homes.”¹⁶ In 2004, national Insurance Information Institute (III) spokesman and chief economist Robert P. Hartwig remarked that “the underinsurance problem lies just beneath the surface all across the country,” “the problem is everywhere,” and that “disasters simply expose it.”¹⁷ Fireman's Fund Insurance Company issued a press release about underinsurance that focused specifically on the California wildfires: “the 2003 California wildfires left many families without homes and without enough money to rebuild, because they were underinsured.”¹⁸

Recovery for homeowners who were underinsured following the 2003 San Diego wildfires proceeded slowly (or not at all) as they tried to move on with their lives and cobble together enough money to rebuild or purchase a home elsewhere. More than a year and a half after the fires, the official recovery centers could offer little help to people who were still having insurance difficulties; if anyone could help those homeowners with insurance issues, it would be a lawyer or a case manager at a charity

16 Insurance Information Network of California, “The Goldilocks Theory of Insurance: Not Too Little, Not Too Much, But Just Right,” news release, January 1, 2000.

17 Joseph B. Treaster, “Homeowners Come up Short on Insurance,” *The New York Times*, August 31, 2004. Similar attributions of Hartwig's comments about the persistence of underinsurance have been made in other articles: see Rome Neal, “Millions of Homes Under-Insured,” *CBS News*, February 11, 2009. Yet Candysse Miller, spokeswoman for the Insurance Information Network of California (IINC), a California-specific organization that operates under the umbrella of Insurance Information Institute, apparently denies that the problem is widespread, saying that the issue of underinsurance following the 2003 wildfires generated “a lot of headlines,” but that it was not a “sweeping problem.” Kathy Chu and Elizabeth Weise, “Wildfires Spotlight Insurance Coverage Issues,” *USA Today*, November 2, 2007.

18 Fireman's Fund Insurance Company, “Fireman's Fund: Too Many Underinsured for Fire,” news release, August 31, 2004.

like the Red Cross or Salvation Army.¹⁹ The umbrella nonprofit organization for four of the recovery centers, the SDFCRT, was formally dissolved. Recovery workers moved on to other life projects. One recovery group, the Cedar Fire Rebuilding Recovery Group (CFRRG) – which had branched off from the Lakeside recovery center – continued to hold a monthly support meeting for homeowners who were still rebuilding.²⁰

Years after the 2003 fires, some insured homeowners who still had not established permanent housing continued to plod along. Some were actively rebuilding. Others were saving up and hoping for the day they could break ground or resume construction. Numerous burned lots had homes that were stalled in various states of completion; some lots were not even cleared. Recovery was slow. Only 10 percent of the primary structures destroyed in the unincorporated areas of San Diego during the 2003 fires had completed the rebuilding process 15 months after the fire.²¹

For the next four years, legal battles between policyholders and their insurers raged on behind the scenes. Area newspapers ceased running stories on the fire and on how fire survivors were faring. In the public eye, the Cedar fire became a historical event.

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- 19 As one community recovery organizer stated: individuals eventually stopped coming to the meetings in 2006 because they had their “recovery plan in place.” They either were being supported by a lawyer, were actively rebuilding, or were in case management with a disaster relief agency. (Interview with community organizer, May 2008).
- 20 As of 2008, CFRRG was still meeting monthly to support homeowners who were actively engaged in the rebuilding process. Members were still posting regularly to the CFRRG listserv.
- 21 County Rebuild Status Report, San Diego County Department of Planning and Land Use, January 16, 2005.

WILDFIRE REVISITED

“Lightning never strikes the same place twice” – except, of course, in San Diego. Just four years after the Cedar, Paradise, and Otay fires started in the easternmost reaches of San Diego County, another set of fires ignited in the same general region as the Cedar fire. Originating in the east and raging westward, fueled by windy conditions and low humidity, the Witch Creek, Harris, Rice, and Poomacha fires together destroyed an estimated 1600 homes in the San Diego area.²² Just as in October 2003, multiple counties in southern California were simultaneously affected by wildfires, including Los Angeles, Orange, Ventura, Santa Barbara, San Bernardino, and Riverside.

The most destructive of the four San Diego fires, the Witch Creek fire, began the morning of October 21, 2007 when dry vegetation growing near electric power lines caught fire.²³ A state of emergency was declared, by President Bush, for the affected parts of southern California. Later, the declaration was revised to be a “major disaster” for the State of California.²⁴ The Witch fire was the third most costly wild land fire in

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- 22 October 2007 Fires: Community Needs Assessment Update (San Diego Foundation, 2008), http://www.sdfoundation.org/Portals/0/Newsroom/PDF/Reports/Full_AFTF.pdf. Fire activity was not limited only to these fires: there were three other fires burning in San Diego County, though they did not cause much property damage.
- 23 Two investigations by the state of California concluded that the Witch Creek and Rice Canyon fires were caused by equipment owned by the local gas and electric company, SDG&E, as well as by the cable company, Cox Communications. SDG&E has “so far paid more than \$1.5 billion to insurance companies, individuals, and governmental entities” – but “without admitting legal liability.” J. Harry Jones and Morgan Lee, “SDG&E, City Settle Fire Claims,” U-T San Diego, June 13, 2012, <http://www.utsandiego.com/news/2012/jun/13/tp-sdge-city-settle-fire-claims/>.
- 24 “At Governor’s Request, White House Declares Emergency and Major Disaster for Southern California Wildfire Areas,” California Capitol Hill Bulletin 14, no. 35

the US, in terms of the insurance value of property destroyed, behind only the 1991 Oakland Hills fire and the 2003 Cedar Fire.²⁵

Individuals and communities at all points along the economic spectrum were affected by the 2007 fires, just as was the case in 2003. Professionals and blue-collar workers, retirees and migrant workers all lost their homes – but the most socially vulnerable did not have private home insurance. Geographically, the fires burned a wide swath across the eastern part of the County. Burned homes were located in three cities, two American Indian reservations, and in many regions across the unincorporated area of the County. Some communities were hit twice with fire damage: once in 2003 and again in 2007. Yet, the 2003 and 2007 fire paths did not generally overlap in areas dense with dwellings. It appears that only one family lost a home at the same location in 2003 and again in 2007.²⁶

A number of community organizers who had run disaster recovery centers for the 2003 fires joined forces once again. They resurrected the SDFCRT nonprofit that they had dissolved just a few years prior. Financed in large part by the San Diego Foundation, organizers opened long term recovery centers all across the County in fire-affected areas. Each of the recovery centers provided programming, resources, and

(2007).

- 25 Top three most costly wildland fires in the US in terms of insured property coverage only: 1) the Oakland Fire of Oct 20-21, 1991 (\$1.7B in 1991 dollars); 2) the Cedar Fire of Oct 25-Nov 4, 2003 (\$1.06B in 2003 dollars); 3) the Witch Fire of October 21-24, 2007 (\$1.1B in 2007 dollars). 2008 California Factbook (Insurance Information Institute, 2008).
- 26 Allison Hoffman, “San Diego Couple Hope Third Time’s Lucky,” Los Angeles Times, April 20, 2008, <http://articles.latimes.com/2008/apr/20/news/adme-twiceburn20>.

information directly to survivors. Working in tandem with disaster relief charities, center staff put fire survivors in touch with opportunities for assistance-in-aid, grants-in-kind, as well as counseling and support provided by other organizations. One center offered its clients direct and sustained help with insurance issues; however, most center staff, case workers, and volunteers referred fire survivors to organizations specifically geared toward insurance matters.

Just as in the 2003 fires, Community Assisting Recovery Efforts (CARE) held evening insurance workshops for fire survivors all around the County. During the day, CARE staff would field phone calls and meet with fire survivors. CARE provided direct one-on-one insurance claims counseling, which was facilitated by individuals with deep knowledge of and experience with the insurance claims process.

Also on the scene in San Diego was an organization that had been around since the 1991 Oakland fires: United Policyholders (UP). At its founding, UP focused on providing direct assistance to policyholders in the aftermath of loss. At the time of the 2003 fires, the organization appears to have focused mainly on effecting consumer-friendly changes in insurance regulation and legislation – rather than working on the ground with San Diego homeowners.²⁷ But in the aftermath of the 2007 fires, UP once again offered programming directly to fire survivors in addition to its legislative work. In that endeavor, the organization coordinated with Scripps Ranch fire survivors, who had lost homes in 2003, to create an insurance claims mentoring program for the new fire survivors. UP also set up a restricted e-mail list that enabled 2007 fire survivors to

27 Steele, “Crusader provides CARE to fire victims.”

talk amongst themselves regarding recovery issues; brought in experts once-weekly to give thematic talks on insurance and rebuilding issues at a local church; organized opportunities for policyholders to meet in groups by insurance carrier; and helped arrange for representatives from the California Department of Insurance to meet with policyholders regarding insurance claims issues.

Both Community Assisting Recovery Efforts and United Policyholders offered essential insurance-related support to fire survivors in the aftermath of the 2007 San Diego area wildfires.²⁸ Through the efforts of these organizations, along with the efforts of one particular local recovery center that was staffed with individuals with interest and experience in insurance issues, fire survivors received a great deal of instruction in insurance matters.

Just as was the case after the 2003 fires, organizers working on behalf of disaster recovery organizations found that many fire survivors had insufficient insurance coverage to rebuild the homes they had. In a survey of 2007 fire survivors conducted by United Policyholders, most respondents reported that they were underinsured; on average, fire survivors were short by \$319,500.²⁹ CARE had similar findings,

28 While these two organizations served the same clientele, their services were different: CARE staff held policyholder education workshops multiple times per week and delved into nitty-gritty individual cases, to offer individualized support and feedback as fire survivors navigated their complex claims. In contrast, United Policyholders disseminated general advice on the claims process through lectures and online offerings, building up an easily searchable online information clearinghouse. UP also created organized, formal opportunities for fire survivors to exchange support with one another.

29 United Policyholders, "Roadmap to Recovery Surveys," website, http://uphelp.org/library/resource/survey_results#a, (Last accessed June 20, 2012). The sample was self-selected: participation was encouraged of all survivors who had been offered assistance by the recovery group in the aftermath of the fire. There is

contending that the fire survivors the group helped in the aftermath of the 2007 fires were covered under their policies, on average, for 55 percent of the full replacement value of their loss; only 8 percent were insured to at least 80 percent of their loss.³⁰ The San Diego Foundation, primary donor to the long term recovery centers located in fire-affected communities, reported one year after the fire that “[n]early all of the 1,600 homes affected by the wildfires were underinsured and the homeowners are still struggling with their insurance companies.”³¹ A FEMA report on the 2007 Southern California Wildfires indicated that though over 95% of individuals were insured, “almost everyone is UNDERINSURED. Overall, those insured have coverage for 50%-60% of replacement cost.”³²

Just as was the case after the 2003 fires, rebuilding after the 2007 fires was slow. By summer 2008, only 4 percent of the 1600 homes destroyed in both the unincorporated and incorporated parts of the County had completed the rebuilding process.³³ The most

no reported response rate.

- 30 “Is Underinsurance a Problem?,” Community Assisting Recovery (CARE) website, January 14, 2009. <http://www.carehelp.org/insure-to-value/908-insure-to-value/74-is-underinsurance-a-problem.html>. (Last accessed, June 20, 2012)
- 31 “The process of obtaining a fair insurance settlement is proving to be arduous and stressful for the majority of homeowners, with many, including those who had purchased extended coverage policies, finding that they do not have sufficient insurance to rebuild a comparable home or to cover alternate living expenses for the duration of time it will take them to rebuild.” October 2007 Fires: Community Needs Assessment Update.
- 32 FEMA, Wild fires, FEMA Disaster #1731, Composite Recovery Program Summary, December 7, 2007. Attached as “Exhibit 1” to a depublication request written by United Policyholders regarding *Agnes H. Everett v. State Farm General Insurance Company* (2008) 162 Cal. App. 4th 649. Emphasis original.
- 33 October 2007 Fires: Community Needs Assessment Update.

common reason for delays cited by the San Diego Foundation, based on reports of long-term disaster recovery workers, was the continued insurance claims negotiation between insurers and fire survivors.³⁴

After the 2007 fires, individuals working within the insurance industry acknowledged the existence of home underinsurance – just as they had following the 2003 fires. An insurance industry spokesperson attributed underinsurance to the failure of homeowners to report the changes they have made to their structures.³⁵ Another spokesperson suggested that underinsurance may be exaggerated, since – according to a report in the *San Diego Union-Tribune*, policyholders tended to rebuild bigger homes after loss.³⁶ The report contended that two years after the 2003 fires, more than 96 percent of Scripps Ranch fire victims were building bigger houses, with 69 percent rebuilding houses at least 500 square feet larger than the homes that burned.³⁷ Dan Dunmoyer, president of the Personal Insurance Federation, argued that the “story of

34 Ibid. In contrast with 2003 fire survivors, it appeared – to the San Diego Foundation at least – that 2007 fire survivors were taking more time in the claims process to ensure that they did not settle too quickly and for less than what they were entitled to under their insurance policies.

35 Matt Brady, “California Underinsured Homes Not Insurers’ Fault, Says Hartwig,” *Property Casualty* 360, November 15, 2007.

36 Insurance Information Network of California, “Underinsurance Q & A,” news release, November 13, 2009, <http://www.iinc.org/articles/317/1/Underinsurance-Q--A/Page1.html>.

37 Jeanette Steele, “Some Rebuild, Others Wait: Scripps Ranch Owners See Benefits of Rebuilding Bigger,” *San Diego Union-Tribune*, October 24, 2005. It is important to note that just because homeowners rebuilt larger homes than the ones they lost does not in any way imply that they had sufficient insurance to rebuild the homes they once had. Homeowners may take out loans, dip into savings, and otherwise attempt to cut construction costs in order to add value to their homes.

under-insurance has to be drawn into question.”³⁸

Despite the suggestion that underinsurance may be overblown due to the tendency of homeowners to rebuild bigger homes than the ones they lost, it appears that the California Department of Insurance considered underinsurance a problematic condition of the market for home insurance in California. Concluding after investigation that underinsurance is a “common” situation for many homeowners,³⁹ California Insurance Commissioner Steve Poizner led the California Department of Insurance in December 2010 to impose more stringent regulations on insurers. The regulations pertained to the methodology insurers use to estimate property values prior to loss and to the legal liability insurers must accept when providing insurance limit recommendations to homeowners.⁴⁰

CHAPTER SUMMARY

The 2003 and 2007 San Diego area wildfires together destroyed over 4,000 homes. The vast majority of homeowners who lost their homes in these fires had insurance through private insurance companies. When San Diego disaster-affected homeowners made claim to their insurance companies for their large losses, local and regional recovery organizations who were geared toward facilitating community and household recovery found that one of the biggest problems homeowners faced in their recovery efforts was

38 Ibid.

39 Marc Lifsher, “Wildfires Heat up Debate on Rising Rebuilding Costs; Are Policies Adequate to Help Make Homeowners Whole,” *Los Angeles Times*, June 6, 2008.

40 Patricia-Anne Tom, “Calif. Homeowners Underinsurance Regs Take Effect, Despite Legal Challenges,” *Insurance Journal*, June 28, 2011, <http://www.insurancejournal.com/news/west/2011/06/28/204230.htm>.

underinsurance. These organizations concluded that homeowners simply had too little compensation available under their insurance policies to rebuild the homes they had lost.

The particular details of community and household recovery from the 2003 and 2007 San Diego wildfires are historically specific in place and time, but natural disasters such as these will always occur. Claims will continue to be made by disaster-affected homeowners against their insurance policies. If history is any guide, underinsurance will persist despite efforts by the industry and regulators to provide adequate insurance-to-value. Consequently, organizations and individuals active in long-term disaster recovery will continue to face difficulties with helping communities and households restore their lives and homes.

CHAPTER 5: MISCONCEIVING HOME INSURANCE

The typical buyer of insurance is completely without skill or experience in interpreting legal contracts of any nature, and the insurance policy is not an exception. The insurance contract being necessarily unilateral, to be taken “as is” or not at all, the insured has no power and no opportunity to negotiate its provisions, and, in consequence, is even less likely to understand what he has bought than he would otherwise be. Therefore, he is forced to rely upon the skill and the good faith of the insurer or its representative, just as he would upon the skill and good faith of his doctor or lawyer.¹

In February 2008, I relocated to San Diego with the aim of understanding post-disaster insurance claims process and outcomes for survivors of the October 2007 and October 2003 wildfires in San Diego County. Upon my arrival, I entered a whirlwind of formal and informal insurance workshops, insurance-related lectures, and community recovery center activities geared toward helping the most recent group of fire survivors rebuild their homes and lives. Events were held in southeastern regions of the county not too far from Mexico, at the northeastern American Indian reservations, and in more centrally

1 Henry K. Duke, “Insurance Ethics—From the Inside Looking Out,” *The ANNALS of the American Academy of Political and Social Science* 363, no. 1 (1966): 102 – 107.

located suburban neighborhoods in the cities of San Diego, Poway, and Escondido.

While most of San Diego had moved on, long past the widespread evacuations and the persistent smell of smoke, recovery efforts to help individuals who had lost their homes and routines in the October 2007 fires were in full swing. Just four months after the fire that claimed their homes, survivors of the 2007 fires were in the thick of handling their insurance claims, deciding upon rebuilding plans, settling into temporary housing, and assessing the compensation they would have available. Their disaster recovery outcomes were, as yet, unwritten. I observed 2007 survivors at 61 community meetings, and more informally, at local disaster recovery centers. These observations afforded invaluable perspective on how household recoveries were unfolding in real time.

In contrast with the 2007 fire survivors, individuals who had lost homes in the 2003 fires considered themselves recovered – or at least had been working on recovering during the four previous years. As such, they were in a good position to share stories about the process and eventual outcomes of their insurance claims experiences at a comfortable temporal distance from a difficult period of their lives. I interviewed 46 homeowners who had lost homes in the 2003 fires.

I used both non-random and random sampling methods of subject recruitment. For the random sampling aspect of my methodology, I selected households randomly from lists of properties burned in 2003 that were put out by San Diego County, the City of San Diego, and the City of Poway. I sent out 147 letters to individuals who were listed on the burn list as having sustained a total loss, which yielded 33 participants.² In order

2 Besides the 33 subjects I was able to locate through a random sample of the 2003 fire lists, six homeowners who responded to my contact attempts were ineligible to

to maximize case diversity, I also employed non-random methods of subject recruitment: I solicited referrals through community organizations and conducted snowball samples from interview participants and other informants. I selected some participants via referral because I wanted to be sure to include individuals who were highly involved in community recovery organizations; second, I wanted to avoid biasing my sample against individuals who might have been disinclined to respond to a solicitation letter from a stranger about an interview covering a potentially sensitive topic. It was not uncommon for fire-affected families to sign confidentiality agreements with their insurers.³ I obtained 13 interviews with fire survivors through recovery organizations and referrals.

By including only homeowners who still were the owners of record for the destroyed or damaged property in the sampling frame, I have excluded from this study those individuals who probably tended to have poorer insurance experiences than average. One major reason why individuals rebuilt slowly or did not rebuild at all after the wildfire is that they had insufficient compensation under their insurance policies to rebuild. Thus, the population of people who sold their properties after the fire and

participate: one did not have a property loss at all, one had a total loss but had no insurance, and four had experienced only partial losses. Three members, who had had total losses, declined to participate. One said his household was horribly underinsured, that his wife thought it would not be good for them to participate, and that they simply wanted to “get past it.” A second declined because she was in a very trying underinsurance situation and had no time to talk about her experiences. A third declined but gave no specific reason other than to say that he had had a good experience with his company “not like others.” Finally, two additional eligible respondents agreed to participate in principle but were unable to commit to an interview time.

3 Jeanette Steele, “Owners are paid over policy limits - Payments gratifying to residents, advocates,” *San Diego Union-Tribune, The (CA)*, August 29, 2004: B-1.

moved away is likely to include a disproportionate number of the severely underinsured. The truncation of my sample, while resulting in a sample that does not represent all policyholder experiences, actually serves to strengthen the findings of this study: the kinds of ill-effects policyholders experienced due to underinsurance are probably more frequent and they may be worse than the underinsurance situations I describe.

Interview subjects were drawn from both rural and suburban areas: of the 46 interviews, 14 were with homeowners who had resided in suburban incorporated areas, while 32 were with individuals who had lost homes in rural and semi-rural unincorporated areas. A total of 10 respondents were unmarried. Most respondents were white, reflecting the majority-white demographic makeup of homeowners in the neighborhoods hardest hit by the fires.⁴ Despite their racial homogeneity, economically, interview subjects ranged from earning a lower-middle income to an upper-middle income – judging by their reported occupations. There was considerable occupational diversity among interview subjects; subjects included machinists, construction workers, gardeners, secretaries, custodians, teachers, retirees, law enforcement officers, firemen, artists, lawyers, architects, engineers, corporate buyers, and retail store managers. There were few subjects with very low incomes; many of the homeowners residing in the lowest income area affected by the fire did not have an insurance policy in place.⁵

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- 4 While American Indian reservations were hit hard by the fire, tribal residents tended to have home insurance organized by their tribes, through a special program for housing on Indian lands.
 - 5 Leslie Wolf Branscomb et al., “Fire recovery snapshots,” *San Diego Union-Tribune*, October 24, 2004: B–8; Alex Roth, “For uninsured, where to turn? Reasons for lack of home coverage vary feds taking applications for grants, loans,” *San Diego Union-*

The majority of homeowners I encountered had typical “replacement cost” insurance policies. According to these policies, policyholders are initially entitled to the depreciated actual cash value of their loss subject to policy limits and sub-limits. As they rebuild their homes and replace their property, they are entitled to collect additional reimbursement (up to limits) for expenses incurred. Besides choosing whether to accept the a depreciated cash settlement of their loss or to rebuild, policyholders are also technically permitted to apply the replacement cost benefits of their insurance policies toward the purchase of a similar home elsewhere; however, they must finance the cost of the land.⁶

The most common type of “replacement cost” home insurance policy, which is formally referred by the California Department of Insurance as “Limited Replacement Cost Coverage With an Additional Percentage,” has a primary dwelling (“Coverage A”) policy limit structured as a two-level cap.⁷ The first level is a concrete numerical base

Tribune, The (CA), November 9, 2003: A-1.

- 6 My impression is that the replace elsewhere benefit was exercised more frequently following the 2007 fires than it was after the 2003 fires. I did not interview anyone who invoked this policy benefit. Consumer groups suggested that insurers were hesitant to do this, pushing policyholders who did not want to rebuild to accept an actual cash value settlement. The CDI issued a clarification memo after the 2007 fires, reasserting the right for policyholders to exercise the replace-elsewhere benefit, which would provide up to the full replacement cost benefits in the policy absent the value of the land of the new property.
- 7 Standards and Training for Estimating Replacement Value on Homeowners’ Insurance, California Department of Insurance (2010) (CDI Response to National Association of Mutual Insurance Companies (NAMIC) and the Pacific Association of Domestic Insurance Companies (PADIC), May 11, 2010 Written Comments). In California there are four basic policy varieties. “Other than a limited number of homeowners who qualify for guaranteed replacement coverage offered by only a small number of insurers, the vast majority of homeowners have one of three kinds of insurance coverage on their home as defined in the California Residential Property Insurance Disclosure Form from Insurance Code Section 10102: Limited

policy value assigned to the primary dwelling based on its characteristics, such as its age, size, and construction type. Other major property coverages, including limits for personal property and other structures (i.e. unattached garages, outbuildings, driveways, patios, gazebos), are derived as percentages of this concrete numerical value for Coverage A. The second level is an “extension:” if the base policy value proves insufficient to rebuild or replace the primary dwelling in the aftermath of loss, policyholders can recover additional compensation up to a specified percentage of the dwelling base value. Within the industry, policy extensions are represented as buffers that can help protect individuals from insurance insufficiency caused by unforeseen price spikes in the aftermath of disaster, which are brought about by surges in demand for materials and labor.⁸ With or without an “extension,” a limited – as opposed to a

Replacement Cost Coverage With an Additional Percentage which pays replacement costs up to a specified amount above the policy limit; Limited Replacement Cost Coverage With No Additional Percentage which pays replacement costs up to policy limit only; Actual Cash Value Coverage which pays the fair market value of the dwelling at the time of the loss, or the cost to repair, rebuild, or replace the damaged or destroyed dwelling with like kind and quality construction up to the policy limit.

- 8 John Burns, who was General Underwriting Superintendent for State Farm Fire & Casualty Company in 1997, made the case that the extension is what covers the additional costs of post-disaster price spikes. He wrote in testimony to the California Department of Insurance, “based upon presently available data, it is our view that policyholders purchasing a homeowners policy at 100% insurance to value from State Farm have adequate protection against the potential for demand surge. This arises because, if a policyholder insures with State Farm at 100% to value, the homeowners policy automatically includes an extension of coverage of 20% above the Coverage A amount without additional cost. This should be sufficient to cover any additional costs that might be created in the homeowners line by a temporary surge of demand for building materials and labor.” Investigatory Hearing on Replacement Cost Calculation Methodology, Before the Insurance Commissioner of the State of California, California Department of Insurance (1997) (statement of John Burns, General Underwriting Superintendent at State Farm Fire and Casualty Company).

guaranteed – replacement cost policy caps the compensation available to policyholders to a dollar figure that may or may not correspond to the actual cost to rebuild their homes. Most interview subjects had “Limited Replacement Cost Coverage With an Additional Percentage.”

Semi-structured interviews with homeowners were conducted in-person or over the phone, lasting 1-2 hours. Questions guided homeowners through the chronology of their claims, starting with the features of the home they lost. Initial questions invited homeowners to reflect upon how they came to have insurance with their chosen company, pre-loss interactions with their agent, the immediate aftermath of the fire, interactions with adjusters, reactions to the loss within their household, temporary living arrangements, and whether they knew early on that they wanted to rebuild. In the second half of the interview, questions asked homeowners to reflect upon whether they felt they had enough compensation due to them under their policies to rebuild, how they came to learn whether their compensation would be adequate, why they chose not to rebuild, how they managed to rebuild in spite of insurance insufficiency, how they perceived assistance provided by community organizations, and the personal costs of the claims process.

When reporting information obtained through confidential interviews, I have, to the extent possible, withheld identifying information about persons and organizations.⁹ I

9 To the extent that I discuss identifying details about persons and organizations, I do so only to the extent that the details I disclose are publicly available information. By publicly available, I mean either of two conditions must be met: 1) That the information is currently available to a member of the public; 2) That the information could have been gathered by a member of the public through observations that do not require special access.

have assigned each interview participant a pseudonym and obscured some of the details of their situation, in order to protect their privacy.

Individuals with guaranteed replacement policies reported being largely satisfied with the coverage provided to them under their insurance policies. Liz Gusfield, a fire survivor in the incorporated area, described her serendipity at learning the provisions of her policy after her loss:

Did you have guaranteed replacement?

We did, which, before the fire, you could have held a gun to my head, I couldn't have told you that's what I had, you know, because all that terminology meant nothing to us. Thank goodness we had that.

-- Liz Gusfield, incorporated area

It was only after the fire that most learned that guaranteed replacement coverage was far superior than the standard insurance policies offered by other companies.

The vast majority of interviewed 2003 fire survivors reported that the amount of compensation available to them under their limited policies was much less than the cost required to rebuild.¹⁰ My sample is consistent with observations made by disaster

10 It is difficult to exactly calculate a homeowner's amount of policy insufficiency during a general interview about claims process and payouts, since to establish a concrete comparison between the policy limits and the costs to reconstruct the home that was lost requires granular information about the home that burned, accurate cost-data for reconstructing those features, and full disclosure of all relevant insurance policy limits. Moreover, actual costs can vary from contractor to contractor. Yet, the presence or absence of gross underinsurance is not difficult, in principle, to approximate: when a dwelling's insurance limits are recalculated as insurance per-square-foot, and this per-square-foot-figure is well below what it would cost to build a house of that size with its overall quality of features, it can be safely concluded that individuals have insufficient compensation due to them under their policies for rebuilding. A second rough indicator of the presence of underinsurance occurs when the home a homeowner proposes to rebuild is basically equivalent to the home that was lost, but the insurance compensation due under the policy is insufficient to cover costs. Among interviewed homeowners, both indicators were present: some homeowners reported being insured for as much as

recovery workers who were active during the 2003 and 2007 fires and who concluded that fire-affected households often had insufficient coverage under their policies for rebuilding. It is also consistent with high rates of underinsurance estimated by Marshall & Swift/Boeckh, manufacturer of leading construction cost estimation software that many insurers have adapted for their underwriting use. According to Marshall & Swift/Boeckh, the majority of homeowners – nationwide – have insurance coverage under their contracts that would provide insufficient compensation to rebuild their homes following a total loss.¹¹

Of interviewed fire-affected homeowners with limited replacement cost policies, a handful still perceived their policy limits as sufficient for rebuilding the homes they lost. These individuals were different from other interview subjects in the sense that they had specific occupational experience that had enabled them to better ensure, prior

\$50 per square foot below the cost per square foot to rebuild even the most basic house, and some homeowners who attempted to rebuild the exact same home they had (and were able to do so because current building codes would not prohibit it) found that their compensation was lacking. Unfortunately, many homeowners could not share their exact policy limits with me: some could not find their old insurance paperwork or had thrown it out, some never received a fresh copy of their policy after the loss (because it burned and had never been resent to them by their insurer), and some did not feel comfortable sharing the details of their finances. The most consistent measure of policy limit insufficiency I have across interview subjects is subjective: whether they felt they had enough coverage due to them under the policy to rebuild the homes they lost.

- 11 Marshall & Swift/Boeckh, “Marshall & Swift/Boeckh Insurance to Value Index for Residential Properties Continues to Improve,” news release, June 21, 2012, <http://www.prnewswire.com/news-releases/marshall--swiftboeckh-insurance-to-value-index-for-residential-properties-continues-to-improve-159850025.html>; Marshall & Swift/Boeckh, “MSB: Degree of Home Undervaluation Shifts in 2008,” news release, June 17, 2009, <http://www.msbinfo.com/Company/News/17>.

to loss, that the coverage provisions listed in the contract would be adequate.¹²

BUYING AND RENEWING HOME INSURANCE

When a policyholder attempts to buy home insurance, an insurance agent will typically ask the homeowner a series of questions in order to place the business. These questions include the date the home was built, how many rooms it has, where it is located, and its basic construction type. The agent will enter information collected by questioning the potential policyholder into underwriting software, where it is combined with public and private information already available to the insurer. This information may include previous property losses for the home or the policyholder, the property's proximity to fire stations, and other rating information pertinent to the location.¹³

After the agent collects information, the policyholder will be presented with a base

- 12 Of a sample of 46 fire survivors who lost homes in the 2003 fires, ten were entitled to an amount of insurance under their insurance contracts that was sufficient to rebuild the homes they lost. Of these, six had guaranteed replacement policies. Indeed, no homeowner with a guaranteed replacement policy indicated that they were dissatisfied with the compensation they received for their dwelling. The remaining four had extended replacement policies and were satisfied with their coverage and payouts. Two fire survivors with adequate policy limits to replace their homes had deep knowledge of rebuilding costs: one was an architect and the other was a contractor. In the interviews, they described reviewing the sufficiency of their limits on a yearly basis – and when appropriate, pushing for higher limits based on their expertise. Another two fire survivors who felt that the coverage provided under their extended replacement cost policies was sufficient to replace their homes were employed as corporate buyers, in high-level executive positions. Their primary occupational role was to evaluate complex contracts on behalf of corporations, in order to compare services among competitors and to negotiate favorable transaction terms.
- 13 It is a process that involves very little time. In the words of one 2007 fire survivor (who was at an insurance workshop in May 2008): “. . . all you have is a 20-minute conversation with your agent about your insurance policy. Then, you just receive renewals in the mail periodically.”

policy, premium, policy limits, and optional endorsements (which can increase the premium) that are typically generated using valuation software. The base policy and options available to the policyholder will depend on the company, on the riskiness of the policyholder/property according to company risk assessment algorithms, and on what features the agent presents as options. The potential policyholder can either take or leave the base policy, which includes the primary dwelling limits, and select optional endorsements. Through this process, insurance companies establish the value they will agree to insure.¹⁴ For the most part, it appears that since policyholders do not understand their coverage, they tend to defer to the discretion of their agents and insurers to value their property.¹⁵

When conducting interviews with San Diego wildfire-affected homeowners, I asked them to recall how their policy limits were established. A few guessed that their policy limits were determined based on the purchase price of their home, which is likely incorrect since insurable values for rebuilding costs are not the same as the market price. Mostly, fire survivors said that they did not know how the company calculates policy limits. Evelyn and Herman Callegas, who had purchased their home just months

- 14 United Policyholders, Underinsurance--Request for Depublication Re: Everett v. State Farm Insurance Company (2008) 162 Cal. App. 4th 649. <http://www.uphelp.org/sites/default/files/Everett%20v.%20StateFarm%20Brief.pdf> Last Accessed: February 14, 2011. See also: "Fireproof Your Insurance." n.d. Community Assisting Recovery Inc. (CARE),
- 15 "Homeowners Coverage Knowledge Gap Wide Among Consumers," Insurance Journal, August 24, 2010, <http://www.insurancejournal.com/news/national/2010/08/24/112704.htm?>. See also: "Insurance IQ" Study (National Association of Insurance Commissioners (NAIC), 2009), http://www.naic.org/documents/newsroom_iiQ_Executive_Summary.pdf. Indeed, industry-sponsored surveys have revealed the extent of misunderstandings homeowners have about the nature and scope of their insurance coverage.

before it burned up in the fire, were among many who had ventured such a guess:

So who set the policy limit?

The insurance company.

Okay. How did they do that? What do you know about it?

By square foot. They ask you, you know, what the house is made of, the square footage of the home, the purchase price of the home. I guess they go by those things.

-- Evelyn Callegas, incorporated area

Like Evelyn Callegas, Peg Keflec also perceived the methodology by which insurers set her policy limits as an internal matter. Peg, a divorced woman who was living alone in a small condo in the furthest reaches of the east county, explained her understanding:

I don't know how they came to that number either, because it actually, it was not...the amount was not only what the mortgage was, it was different amount than what the mortgage was. It was more than what the mortgage was, but...so I don't know how they came to that number either.

-- Peg Keflec, unincorporated area

Most interviewed fire survivors, before the fire, viewed the establishment of policy limits as a natural, taken-for-granted aspect of insurer's routines and procedures. They did not set their own limits, their insurer did; moreover, their insurer set those limits according to a methodology that they often did not understand.

In California, there has been a formal push by the state Senate to help the consumer play a more active role in selecting his or her coverage limits. In a bill passed in 2010, the California State Senate mandated that home insurance consumers be provided with the "California Residential Insurance Disclosure," which is a short handout that distinguishes differences between guaranteed replacement, extended replacement, replacement, and actual cash value insurance. It also advises policyholders of their option to obtain an independent appraisal of their home rebuilding valuation and to

present it to their insurers if they seek higher limits.¹⁶ It is unclear what, if any, effect the residential insurance disclosure – and disclosures like it – will have on the minimal role that consumers appear to play in selecting their limits.

UNDERINSURANCE AS AN UNPLEASANT SURPRISE

Many individuals who had lost homes in the 2003 wildfires learned that the coverage available to them under their insurance policies would not be enough to rebuild. Some policyholders had the experience of being told directly by an adjuster or contractor

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- 16 Property Insurance: Residential Disclosure, (2010). The residential insurance disclosure is required by Section 10102 of the California Insurance Code. The disclosure advises policyholders to obtain an estimate of the cost to rebuild their home from their insurance agent, broker, or company – or alternatively, to secure an independent appraisal of rebuilding costs from a local contractor, architect or real estate appraiser. It should be noted that the text of the disclosure is potentially problematic. First, obtaining a property valuation from one's agent or company is tacitly presented as equivalent to getting an independent appraisal by a construction professional. The disclosure does not suggest that an independent appraisal of value, conducted by a trained professional, is likely to be superior in accuracy to an estimate generated by an insurer's mass approach to valuation. In other words, individuals have little reason to believe that a current estimate given by the company is probably inaccurate to cover the post-disaster rebuilding costs of their particular home. Given the historical inability of insurer-supplied valuations to match rebuilding costs of actual homes, this may lead homeowners to have a false sense of security in their insurer's estimates. Second, policyholders are instructed about demand surge, which is the increase in post-disaster rebuilding costs, inasmuch as they are told that they should consider “increasing [their] coverage limits or purchasing Extended Replacement Cost coverage to prepare for this possibility.” The decision to obtain a percentage extension on the policy is tacitly treated in the disclosure as equivalent to increasing policy limits – a problematic suggestion because an extension amounting to X dollars typically increases the maximum amount payable toward the dwelling by X dollars whereas increasing the policy limit by X dollars increases the amount of payout toward the dwelling by X dollars *and* proportionally increases the coverage limits for other property categories (i.e. personal property and other structures).

hired by the company to investigate and value the loss that the amount of coverage was not commensurate with their home's rebuilding costs. Their adjusters or contractors sometimes broke the news in the early days after the fire, when the lots were still filled with the blackened remnants of their homes. Kathrin Davidson describes her speechless reaction to such an encounter with the company adjuster who was initially assigned to handle her claim:

I think at one point we met at the lot, and he went through some things, and then he came to meet us at the town home that we were staying in, and basically said, "You know, you guys are, you know, I'll have tell you that you are underinsured, and you are probably one of the worst cases I've seen of, you know, underinsured that, you know," of the cases that he was dealing with. . . so we were like, "Really? Oh."

-- Kathrin Davidson, incorporated area

Like Kathrin, Jennifer Lyon and her husband learned that they were underinsured through the adjuster who was working on behalf of their insurer. Just as in Kathrin's case, Jennifer and her husband were directly informed that their insurance coverage was woefully inadequate:

So the adjuster shows up and we're standing there on a gray and rainy day. It looked like a war zone. . . We were waiting there, looking at the war zone that used to be our house and he is an hour late. When he arrives, he says he is an independent adjuster hired by the company from Ohio. He says he has four homes here. Then he says, "we have a problem." . . . He says the other three homes have, "way more coverage, and way less of a house. You need to get your agent on the phone." I was shaking, trying to take a walk, breathing, and dialing [my agent's] cell phone.

-- Jennifer Lyon, unincorporated area

Other fire-affected individuals realized the extent to which their policy limits would be insufficient only after seeking out contractor bids, long after the immediate aftermath.

Jimmy Turner, a government employee who was on disaster-related duty at the time of

the fire, describes such a realization:

When did you realize that it was not enough to rebuild the house, what you had?

JT: Ah, at the point where the contractor was saying it was going to cost X amount of dollars to do this. And looking at the dollar amount that they were trying to give me back, I realized there's no way I am going to be able to rebuild this house unless I get this amount.

-- Jimmy Turner, unincorporated area

Jimmy, like many others, was shocked at his insurance inadequacy. For Jimmy, his underinsurance was not just a practical problem of getting his house rebuilt for what seemed to him like a very inadequate insurance payout; it was upsetting to him that his insurance payout was not what he thought he was due. Sitting at the kitchen table of his basic rebuilt house, surrounded by toys his young children had scattered about, I could see Jimmy's face redden in indignation that his so-called "full coverage" policy did not cover his loss. Home insurance, in his view, was supposed to be enough to replace one's home. Even though his experience showed him that home insurance does not necessarily function to insure the whole home, he still believes that full coverage is at the very center of what home insurance means:

I believe that if the insurance tells you that you are fully covered, and that your home is safe, and you have a full-replacement value on that home, no matter what you and your insurance agent is working out, that insurance company is responsible to get back you in a like kind home.... I mean, fair enough. If my policy says full replacement value, and it's a 5-bedroom wherever it is listed, it is a 5-bedroom, I should very well be able to be able to rebuild a 5-bedroom house no matter what it cost to build it, how much material it takes, and how much time it takes, and the company should be paying that.

-- Jimmy Turner, unincorporated area

Numerous fire survivors who were underinsured and sought to rebuild described having believed that their insurance would function to return them to the home they

lost. For homeowners, the value of their home extends beyond market value – though certainly loss of the asset value of their home through disaster is what policyholders expect insurers to restore. But policyholders expect a kind of restoration that is more complex than simply receiving a home's market value as a claim payout. The value people have for their homes inheres in the relationship they have with it,¹⁷ so the function of replacement cost insurance can be understood in this light: policyholders expect replacement cost insurance to restore them to the relationship they had with their home, their property, their neighborhood before they experienced the loss. Yet, the function of insurance is for insurers to assess premium for bearing a calculable liability, determined in advance using estimation technologies, which may or may not be sufficient to cover a home's actual rebuilding costs in the aftermath of disaster. As discussed in the chapter on insurance history, insurers have tried and failed – due to the difficulty of valuing particular homes accurately – to ensure that policy limits are sufficient to meet post-disaster rebuilding expenses.

Analogizing from Prior Experience

In light of the fact that home insurance has long been inadequate after loss – in most periods besides the guaranteed replacement era – how is it that individuals come to understand insurance as providing full protection for covered losses? As discussed in Chapter 3, prior experiences can produce dispositions that are ill-suited for new

17 Deborah Lynn Becher, “Valuing property: Eminent domain for urban redevelopment, Philadelphia, 1992--2007” (PhD diss., Princeton University, 2009).

contexts.¹⁸ In the market for home insurance, most individuals have little experience with total losses, have little knowledge and experience of insurance underwriting and insurance contractual implications, and have little knowledge and experience of post-loss reconstruction. Just because their experience is limited in ways that might permit a more realistic evaluation of the function of insurance, consumers have a wealth of partial knowledge and experience available to them upon which to base their conceptions.

Cognitive scientists have contended that in situations of missing data, individuals sometimes make inferences about unfamiliar contexts on the basis of knowledge and experience drawn from superficially similar, familiar contexts – a process called schematic projection.¹⁹ When individuals analogize from one context, a “base,” to another context, a “target,” the contextual pair must necessarily share some apparent structure in order for individuals to have recognized the source schema as relevant to the new context. Cognitively, focus tends to be placed on the elements of structure the base context and the target context have in common, which is the “aligned” structure.²⁰

18 Pierre Bourdieu, *The Logic of Practice* (Stanford University Press, 1990); Pierre Bourdieu, *The Social Structures of the Economy* (Polity, 2005); Harold Garfinkel, *Studies in Ethnomethodology* (Wiley-Blackwell, 1967).

19 Dedre Gentner, Keith James Holyoak, and Boicho N. Kokinov, *The Analogical Mind: Perspectives from Cognitive Science* (MIT Press, 2001); Arthur B. Markman and C. Page Moreau, “Analogy & Analogical Comparison in Choice,” in *The Analogical Mind: Perspectives from Cognitive Science*, ed. by Dedre Gentner, Keith James Holyoak, and Boicho N. Kokinov (MIT Press, 2001).

20 Arthur B. Markman and Dedre Gentner, “Structural Alignment During Similarity Comparisons,” *Cognitive Psychology* 25, no. 4 (1993): 431–467; Dedre Gentner and Arthur B. Markman, “Structure Mapping in Analogy and Similarity,” *American Psychologist* 52, no. 1 (1997): 45–56.

To the extent that the source context matches the target context very well, schematic projection usefully equips people to act in situations where they are missing information.²¹ Yet, in circumstances where there are substantial differences in underlying structure between source and target contexts – despite apparent superficial similarity – it can lead individuals to draw mistaken inferences about new contexts. Aspects of structure that are present in the target, but that are not exhibited in the source, are elided.²²

In institutionalized markets, a high degree of “decoupling” exists between outwardly observable characteristics of organizations and their complex, unobservable, behind-the-scenes operational practices.²³ In markets where individuals tend to lack deep experience with the product or service, decoupling creates the potential for individuals to rely on observable, tangential, and ultimately only superficially relevant information to incorrectly infer about the function of products and services. Information used to make incorrect inferences could be proxy signs, which may be poorly reflective of actual conditions. Perceived equivalence between contexts that are very different may be misleading.

In the case of home insurance, to the extent that individuals perceive large loss and small loss insurance claims as similar, individuals may conceive of the function of home insurance in large losses as similar to the function of insurance in small losses. Given

21 Gary A. Klein, “Applications of Analogical Reasoning,” *Metaphor and Symbolic Activity* 2, no. 3 (1987): 201–218.

22 Markman and Moreau, “Analogy & Analogical Comparison in Choice.”

23 John W. Meyer and Brian Rowan, “Institutionalized Organizations: Formal Structure as Myth and Ceremony,” *American Journal of Sociology* 83, no. 2 (1977): 340–363.

that the operation of insurance in small losses is vastly different from its operation in large losses – inasmuch as small losses rarely test the maximum policy limits and therefore do not test the accuracy of property valuations – reliance on conceptions of insurance forged in small loss contexts may lead to misconceptions.

A fair number of 2003 homeowners had – at one time or another – experienced a loss related to an auto accident, a small home damage loss, or a small personal liability loss. Oftentimes small losses were positive insurance experiences; fire survivors often reported good service from their insurance agents and no major issues or coverage problems.

One 2003 fire survivor, Karen Silbey, described the only other claim she and her husband had made before the fire. Her husband, Carson, had hit a large animal with his truck. He called the agent or broker the next day, and the agent handled the claim quickly:

...And called her and told her what happened, and she said, "Take it to a body shop of your choice. Let's get an estimate for damages. It's an act of nature. We're done."

And so it was really straightforward, then?

It was extremely straightforward. We took it over to actually [name of body shop].... Jennifer did the quote, submitted it, and did the repairs, and [my insurer] paid the claim -- and actually because it was considered to be an act of nature, covered under the policy, no deductible, no nothing.

-- Karen Silbey, unincorporated area

Jerilyn Anderson, also a 2003 fire survivor, had a similar experience. She and her husband had a pipe break in their home. After it happened, they informed their insurer of the problem, they arranged for repair, and they were reimbursed for the full amount.

Did you have any previous claims before the fire, any kind of auto claims, or homeowner's claims?

Oh, auto, very little in the auto. I mean, my husband and I rarely had -- I think I've never had an accident since I have driven, and I think he has had one or two in his life, so no, we have had hardly any claims, and as far as the house go, I think we claimed one time we had a faucet under the sink that broke and flooded the kitchen and dining room, and living room.

And was this also with [your company]?

Yeah.

And how did that, what was the outcome of that claim?

It was good. Whatever they said, go get new carpet, and new flooring and whatever, and we did, and they gave us a check and that was it.

-- Jerilyn Anderson, unincorporated area

It is not unreasonable to think that the mental model policyholders have of how home insurance would function in large losses would be influenced by positive, unproblematic experiences with small home and auto insurance claims. One fire survivor made this connection explicit. Vernon Lydell, in answering how he thought his policy limit was set, implied that he simply thought that when a person experiences a loss, the company covers the amount of that loss – just as often happens in auto insurance claims.

Now for your policy, do you know who set the limit?

I have no idea. I don't know how it was working.

Did you ever ask them, "Am I underinsured? or..."

We never did, no, because that didn't occur to us.... We think, you know, you get into a car wreck, they come out, do an evaluation, give you a check, right?

-- Vernon Lydell, unincorporated area

To the extent that policyholders draw inferences about the suitability of coverage on the basis of their small loss claim outcomes, those inferences are not necessarily transferable to the large loss case. Small claims do not test the accuracy of the property

valuation upon which policy limits are based. Due to the superficial similarity between small claims and large loss claims, analogical reasoning may lead policyholders into a false sense of security to the extent that their perceptions of home insurance function in large losses are built upon understandings of insurance in more commonly experienced contexts.

Personal Interactions

As I discussed in Chapter 3, the cultural environment promotes a bias toward expectations of optimistic outcomes by acting to elide suboptimal possibilities from view and promote visions of “best case” possibilities.²⁴ In that chapter, I discuss “framing” as a potential vehicle for conceptual promotion. I suggested that the framing insurance companies provide of the insurance relationship through advertisements – as one of generosity, support, and neighborliness – may support an optimistic expectation of how home insurance functions in total loss. Yet, these advertisements are not the only source of information about home insurance function to which individuals have ready access; in particular, personal interactions policyholders have with their agents may further support optimistic expectations of the function of home insurance.

In all domains of social life, individuals come to form taken-for-granted understandings about how the world works through social interactions.²⁵ In economic transactions, to the extent that individuals have limited experience with the product or

24 Karen A. Cerulo, *Never Saw It Coming: Cultural Challenges to Envisioning the Worst* (University of Chicago Press, 2006).

25 Lynne G. Zucker, “The Role of Institutionalization in Cultural Persistence,” *American Sociological Review* 42, no. 5 (1977): 726–743.

service being sold, personal interactions may mislead individuals into making incorrect inferences about the potential outcome of their transactions. An example of the misleading potential of personal interactions is apparent in the work of Pierre Bourdieu.

Pierre Bourdieu, in his study of the new housing market in France, suggests the misleading potential of personal interactions in person-organization transactions between individuals and the corporate agents who represent organizations. In describing the nature of interactions between potential home buyers and sales agents, he illustrates that the scripted interactions by which home sales organizations collect information for standardized algorithms are used by the sales organization to sort out good credit risks from bad credit risks and to overcome potential objections to the sale.²⁶ As part of the sales routine, the sales agent connotes his or her expertise by highlighting the complexity of the transaction that the potential buyer may find difficult to understand, while at the same time supplying reassuring explanations in plain language for that complexity.²⁷ Neither the agent nor the potential buyer understand the relevant complexity governing whether the transaction will be in the buyer's interests (i.e. manageability of payments, proximity of the house to barking dogs, soundness of construction techniques, etc). Yet, buyers perceive that agents are in a position to assess whether the transaction will meet expectations and, to the extent that the potential buyer and the sales agent share a similar habitus, that the sales agent can be trusted to look after the potential buyer's interests.

In his study, Bourdieu contended that the personal interactions that occurred

26 Bourdieu, *The Social Structures of the Economy*.

27 *Ibid.*

between potential home buyers and sales agents oriented the attention of potential home buyers toward certain aspects of the transaction and diverted it from other aspects. As a result, buyers may themselves in a situation where their initial conceptions of transaction, prior to participating, do not reflect its full reality.

In the case of home insurance, an individual may interpret the insurance transaction as one in which the agent – who is perhaps similar to him or her due to shared ties, community membership, or class status – tacitly or even explicitly warrants the sufficiency of insurance coverage for his or her individual case. Of course, the belief that insurance agents have the ability to ensure the sufficiency of coverage for total loss – absent expert appraisal and/or guaranteed replacement loss settlement benefits – largely constitutes a misconception about the function and operation of insurance following large loss. In reality, just as the home financing transaction is between the financing organization and the home buyer, and not the sales agent and the home buyer, the home insurance transaction is between the insurance company and the policyholder – not between the insurance agent and policyholder.

San Diego fire-affected homeowners appeared to have relied on their insurance agent, prior to their loss, as a stand-in for the insurer. Matt Vitner and his wife believed that his insurance would be sufficient after loss (when in the end he was underinsured) based on a belief in the expertise of their agent and insurer. Matt and his wife are highly educated; he works in technology and she works in finance. He explains how he relied on the agent to set the policy limit correctly due to his perceptions – before the fire – that the agent (and by the extension, the company) had the expertise and responsibility

to do so:

So, how the limit was set was pretty much -- I listened to the agent and, you know, I kind of went along with what they suggested. And, of course, you know, you read the fine print and I'm not sure if they really back then, I have to go look, it's really, they were really providing a lot of information and making it look as though they, the due diligence was on their side.... They insured you, so they know all the ins and outs, you know, they've been dealing with HO3 policies and they wrote it. So, kind of the onus is on them to make sure that the customer is provided for....

-- Matt Vitner, unincorporated area

Silvia Godfrey, a teacher who lost her home in the Cedar fire, also inferred about the sufficiency of her coverage based on her interactions with her agent. She was severely underinsured. She believed that her underinsurance was her fault because she had recently refinanced her home and had not increased her coverage based on its market appraisal – a belief that is clearly inaccurate because policy limits are based on reconstruction costs, not market values.²⁸ She and her agent were in frequent contact with one another before the fire. She recounts the discretion she gave to her agent to value her property based on her perceptions about her agent's qualifications:²⁹

So my agent was always really good about...I am not really good...I am good about detail but not about money and stuff and so as far as...I am very conservative and I don't really know how to value things and she was always good about saying, "Well you know, you probably have this, you probably have that, this is about how much your..." . . . She was very good and very helpful. When we built on Mom's little house, I raised it at that point and she was really nice about coming out and looking at it and giving me an idea, you know, if I had to replace...

-- Silvia Godfrey, unincorporated area

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- 28 Sylvia was one of the few who perceived her underinsurance as her own fault – a trend among fire survivors who did not attend meetings through the disaster recovery centers. She did not attend any insurance-related disaster workshops due to a health issue – only a meeting held by her insurance company.
- 29 The reason she gives for underinsurance as being her own fault is typical of individuals who are unaware of their legal entitlements.

Some of the 2003 fire survivors I interviewed expressed that they had close personal ties with their agents, which probably buttressed the trust that fire survivors placed in them to set limits correctly.³⁰ Jerilyn Anderson was a case in point. She and her husband were severely underinsured. Expressing the long-term relationship she had with her agent before the fire, she explains:

So tell me about your policy that you had at the time of the fire in terms of what company was it with, and how did you manage to decide upon that company.

Well, I'll tell you, we were with [name of insurer]. We have been with [name of insurer], my husband and I, would have been 52 years. He passed away a couple of years ago, so we were married 50 years, and we were with [name of insurer] for almost all of that 50 years with the same agent in La Mesa, and so, you know, we just assumed...we were hugging friends with [him], I mean, you know, we knew him so well and had been with him all these years.

-- Jerilyn Anderson, unincorporated area

Other fire survivors had a multiplex tie with their agent. One's insurance agent can be a brother, neighbor, former student, friend, or a tie connected to oneself through some other kind of close relationship. The trust that fire survivors place in their agents to set their coverage accurately may be bolstered based on the closeness of that relationship; policyholders may believe that these agents, with whom they may be tied in important ways, will look out for their best interests. Jacob Mirren, who spent much of his working life as a teacher and athletics coach, indicated a strong tie with his agent based on a long and deep history of acquaintance:

30 One interviewee shopped for insurance online, one purchased his insurance entirely over the phone, one obtained insurance through a veterans program, and another obtained a policy through a teacher's program – but most interviewees purchased insurance through a local agent or broker.

How well did you know your agent?

Real well. He used to play for me... Yeah, he played for me for about 4 years and I've known him, gosh, basically since I was about 27 years old [laughs] so I have known him for 40 years.

-- Jacob Mirren, unincorporated area

Even people who did not have close ties with their agents had believed, before the fire, that their agents were looking out for them. Adam Newell, who runs a small machine shop, explained to me how important it was to pay close attention to the amount of one's insurance coverage. I clarified his point, asking if he would have known – or if others who had not experienced a loss would know – the importance of doing so. He indicated that this expectation is unreasonable, since it was only after the fire that he realized that he had a “false sense of security”:

[L]ooking back do you feel that it would have been reasonable for you to have put more effort into setting your policy limit? Is this something that you think homeowners would know to do?

Absolutely not. They would not know. I did not know it and I own a business. I mean, I'm not a highly educated person but I am also a business man, so I think it was the relying, the false sense of security that that agent is taking care of you, or looking out for your best interests. . . .

-- Adam Newell, unincorporated area

Adam's comment seems to closely approximate the definition of a fiduciary obligation – which, of course, is not surprising given the recent survey data that suggests that most American adults who make major household financial decisions tend to wrongly believe that their insurance agents are bound by fiduciary obligations to consider the best interests of policyholders.³¹

31 There is no national standard for whether insurance agents are fiduciaries, though it would appear that most people mistakenly believe that insurance agents are bound by fiduciary obligations. Three out of five American adults who self-identified as “investors” (investors=1,319, n=2,012) in a survey conducted by infogroup/ORC during August 19-23, 2010 wrongly believe that insurance agents are fiduciaries.

A small minority of interviewed fire survivors, for one reason or another, reported having become concerned about the sufficiency of their coverage before the wildfires destroyed their homes. To alleviate their concerns, they reported having contacted their insurance agents to make sure that they had enough coverage. After reviewing their policies, their agents reassured them that their limits were fine. Unfortunately, underinsurance occurred even in these situations. Jerilyn Anderson and her husband were one such case. About a year before the fire that consumed their home, they had grown concerned about whether their insurance coverage would be adequate to rebuild their home in a total loss. The basis of their concern was Jerilyn's observation that property values of homes had risen in her area; she was concerned about whether her limits could account for those increases. Though her reasoning was objectively inaccurate, since home market values do not necessarily correspond to replacement cost values, it prompted her to contact her insurance agent. She recounts the story of having approached her agent to inquire about her limits:

The screening question was asked as follows: "Are you an investor? By an investor I mean do you make decisions about where your savings are placed? This could mean you own bank certificates of deposit, stocks, bonds or mutual funds either directly or through retirement plans such as 401(k)'s, IRAs, Roth IRAs or similar plans." U.S. Investors & the Fiduciary Standard: A National Opinion Survey (Infogroup / ORC, 2010), <http://www.hastingsgroup.com/fiduciarysurvey/docs/091510%20Fiduciary%20survey%20report%20FINAL2.pdf>. Courts have made various determinations. For example, in one California case, the court found that while an insurance company does not have all the duties of a fiduciary, an insurer owes a general duty of good faith and fair dealing which is heightened due to the "special relationship" inherent in a contract of insurance." (*Love v. Fire Insurance Exchange*, 271 Cal. Rptr. 246, 221 C.A. App. 3D 1136 (1990), review denied). In another California case, the court found that "the relationship between the insurance company and the policyholder is a fiduciary relationship wherein the insurance company is bound to conduct itself with the utmost good faith for the benefit of the policyholder" (*Shultz Steel Co. v. Rowan-Wilson Inc.*, 231 Cal. Rptr. 715, 187 C.A. App. 3D 513 (1986)).

Do you know how he set, or how the policy limit was set?

Well, you know it is funny you are asking about this. Well, you know, I'm not really sure how the policy limit started. I'm sure after our house was built in 1969, they must have come out and looked. Maybe it raised a little bit every year. I just depended upon them to make sure we had the right coverage, but before the fire, about a year before the fire, I called him on the phone and I said, "Jason, the property values have raised so much out here," because we could see the [inaudible] worth a lot more than it was when we first built, and so I said, "Do we...is our insurance working with that raise in value?" and he said, "Yeah," he took a look at the policy. He said, "Everything looks pretty good, Jerilyn," he said, "It raises automatically, blah-de-blah, at 10% a year," or whatever he said. He said, "You are okay," so I said, "Okay!"

-- Jerilyn Anderson, unincorporated area

Jerilyn had a longstanding relationship with her agent, having purchased insurance from him for well over 40 years. When she called him with concerns, and he reassured her that her policy limits were adequate, she trusted his assessment. Unfortunately, Jerilyn and her husband were severely underinsured.

A similar situation occurred for Kathrin Davidson and her husband. They contacted their agent on two occasions to be sure that their limits were accurate. On one occasion, Kathrin contacted her agent after a relative lost her home in a fire.³² On another occasion, she and her husband received notification in the mail that their "guaranteed replacement" policy was changing to an "extended replacement" policy. In both instances, their insurance agent reassured them that their limits were accurate. After the Cedar fire, they learned that the limits were grossly inaccurate. As she recounts:

32 Only one other fire survivor mentioned that they had a close personal contact who had lost a home, or who had sustained very severe damage to their home.

[W]hen her fire occurred, we contacted our insurance agent and said, "Hey, are we okay with this? Are we insured?" They said, "Yeah, yeah, don't worry, you are fine." Also, at around the same time as when they changed from guaranteed replacement to like policy limits, so we got the notice in the mail about, you know, "Your type of insurance policy is going to change." This was my husband dealing with this. I didn't usually deal with it. He got the notice and made a call to them, and said, you know, "Hey, I noticed the policy is changing. How is that going to affect us? Are we still insured?" "Don't worry. You're good. You are fine." That is what they told us.

-- Kathrin Davidson, incorporated area

The Davidsons and the Andersons acted in accordance with admonitions contained in industry public relations materials for policyholders to get into contact with the agents to "update" their policies.

Interviewed fire survivors overwhelmingly reported that they did not set their own policy limits; rather, either their insurers or insurance agents determined the amount of their coverage. They tended to give discretion to agents on the basis of perceived agent or insurer expertise. In some cases, fire survivors attributed their reliance on the agent to deep ties with the agent or to a belief in the fiduciary nature of the insurance transaction. The pre-loss personal interactions fire survivors had with their agents led many fire survivors to feel assured that their coverage would be adequate in the event of a total loss.

The influence of insurance agents on policyholder misconceptions about the sufficiency of their home insurance coverage extends previous theories of how insurance agents matter in insurance markets. Viviana Zelizer, in her study of how the early life insurance market began in the United States, concluded that aggressive person-to-person solicitation of life insurance policies by life insurance agents was

responsible for breaking through cultural barriers against insuring life.³³ By implementing a sales strategy that centered on personal influence – the persuasive power of informal, everyday communications between persons³⁴ – the dispassionate, remote insurance company was given a new face: the life insurance agent who publicly held himself out to be an altruistic missionary who sought to plead the noble cause of widows and orphans.³⁵ Similarly, Cheri Chan found that the emergence of the Chinese market for life insurance depended crucially on the person-to-person selling strategies of Chinese life insurance agents.³⁶ Chan showed how life insurance agents leveraged norms of trust in intimate personal relationships and norms of reciprocity in slightly more distant relationships to overcome cultural taboos against considering the possibility of untimely death.³⁷ In both of these contexts, life insurance agents were instrumental in defining the social meaning of life insurance such that consumers became receptive to the product.

The role that property/casualty insurance agents play in promoting expectations among policyholders that their insurance policies will be sufficient to meet their

- 33 Viviana A. Rotman Zelizer, *Morals and Markets: The Development of Life Insurance in the United States* (Transaction Publishers, 1979).
- 34 Elihu Katz and Paul Felix Lazarsfeld, *Personal Influence: The Part Played by People in the Flow of Mass Communications* (Free Press, 1955).
- 35 Viviana A. Rotman Zelizer, *Morals and Markets: The Development of Life Insurance in the United States* (Transaction Publishers, 1979).
- 36 Cheri Shun-ching Chan, “Invigorating the Content in Social Embeddedness: An Ethnography of Life Insurance Transactions in China,” *American Journal of Sociology* 115, no. 3 (2009): 712–754; Cheri Shun-ching Chan, *Marketing Death: Culture and the Making of a Life Insurance Market in China* (Oxford University Press, 2012).
- 37 Chan, *Marketing Death*.

expectations of indemnity in the aftermath of loss is an extension of Chan's and Zelizer's insights. The growth of new insurance markets is not the only consequence of agent efforts to promote culturally-consistent meanings of insurance; another consequence, which is visible in the market for home insurance, is the influence those agent-promoted meanings exert on consumer understandings of what the insurance product will do – understandings that may, or may not, match the actual product that insurers provide.

Legal Consciousness

The insight of legal consciousness, a concept in law and society scholarship, is that individuals operate in their daily lives using lay understandings of legality and legal concepts that do not necessarily match codified law-on-the-books nor the law as interpreted by courts. Legal understandings individuals carry around inside their heads are socially constructed, multivalent, and incorporate extra-legal normative and cultural meanings.³⁸ As such, individuals can have a sense of their rights and entitlements that do not necessarily match their entitlements as outlined in formal legal discourse.³⁹

In the context of complex transactions involving contracts, the mismatch between legal understandings among lay individuals and the law as interpreted by courts can be

38 Patricia Ewick and Susan S. Silbey, *The Common Place of Law: Stories from Everyday Life* (University of Chicago Press, 1998).

39 Francesca Polletta, "Structural Context of Novel Rights Claims: Southern Civil Rights Organizing, 1961-1966, The," *Law & Society Review* 34, (2000): 367; Anna-Maria Marshall, "Injustice Frames, Legality, and the Everyday Construction of Sexual Harassment," *Law & Social Inquiry* 28, no. 3 (2003): 659–689; George I Lovell, "Justice Excused: The Deployment of Law in Everyday Political Encounters," *Law & Society Review* 40, no. 2 (2006): 283–324.

problematic. Parties bargain, negotiate, and interpret their relative contractual obligations and entitlements in the shadow of the law.⁴⁰ The ability to act in transaction – in terms of entering contracts, renewing them, and interpreting them – such that one best protects one's interests is a skill. Individuals may misattribute lay meanings of words and phrases as they are used in everyday lexicon to situations in which contractual words governing the purchase or sale of a product have precise, nuanced, technical meanings. Consequently, individuals may misunderstand a product or service governed by a complex contract on the basis that their “reading” of the contract gives them a different impression of transaction process, contingencies, entitlements, and obligations than what they would likely receive in the shadow of the law.

In home insurance, there is great potential for individuals who lack substantive insurance experience in the context of large losses to attribute incorrect meanings to contractual provisions. For example, common insurance policies provide “replacement cost” coverage. Technically, this means that individuals are entitled to collect compensation for loss beyond a depreciated amount reflective of the used condition of the destroyed or damaged object. Essentially, “replacement” is synonymous with “not depreciated.” But lay meanings of the phrase, “replacement cost,” may connote – at least for non-experts in insurance – the replacement of whole objects, such as whole homes. Karla Pendley, who lived in the unincorporated area of San Diego County, expressed exactly this point about the potential for misinterpreting policy language. She said that “she just doesn't understand that when you have replacement cost, why is it

40 Robert H Mnookin and Lewis Kornhauser, “Bargaining in the Shadow of the Law: The Case of Divorce,” *Yale Law Journal* 88, (1978): 950.

that you actually aren't owed the entire cost to replace your home?"⁴¹

Just as the word “replacement” may connote the idea that policies provide enough compensation in the event of loss to replace destroyed property, policies containing “inflation guards” may connote the idea that this feature adequately accounts for any [home] cost increases. An inflation guard is an automatic increase in policy limits that occurs upon policy renewal or periodically during the policy period; it is usually a set percentage or is tied to an index of construction costs. Upon renewal, a policy with an inflation guard will have an increased limit (and potentially increased premium) in order to account for rebuilding cost increases that have occurred in the time since the beginning of the policy period. Unfortunately, while the “inflation guard” does increase policy limits, it does not necessarily function to prevent underinsurance. Yet, fire survivors who lost homes in the 2003 Cedar fire described their supposed “inflation guards” as ensuring that their policy limits stayed accurate through the years. Randall and Sally Marks, who believed they were underinsured by at least \$150,000, discussed how they perceived the increases to their premium and limits over the years:

...they told us that we had replacement value and every year they would bump it up a little bit because of, you know, value of houses and stuff was going up. But, we found out later, they do that based on the national average and not -- and California obviously is a little different, especially San Diego is different than the national average. So, over those 20 some odd years we got more and more undercoverage, you know, but we didn't know it, obviously, I mean we are not professionals in what it cost to rebuild a house.

-- Randall Marks, unincorporated area

41 Karla declined to have the interview recorded, due to concerns about jeopardizing her legal case against her insurer. This quotation is a paraphrased version of her comments, which I took down immediately after the interview.

Similarly, Don and Kaitlin Kendall interpreted the policy limit “escalator” as functioning to ensure that they would not be underinsured. Like many others, the Kendalls learned through the experience of losing their home in the 2003 San Diego wildfires that it had little effect on their total underinsurance:

Okay, and did you know if you had actual cash value, guaranteed replacement on your policy? Do you remember what was in place at the time of the fire?

Let me see. No, I don't think it was guaranteed replacement. They said that they would insure us for the amount of the value of the house and put an escalator to make sure that it was never undervalued and they are the ones that told us, you know, this is what your house would cost to rebuild and this sort of thing. We had no idea.

-- Don Kendall, unincorporated area

Some fire survivors reported having misunderstood the category of coverage known as “code upgrades.” Code upgrade coverage covers the costs, up to a limit, to rebuild an old home that was destroyed in compliance with applicable laws and ordinances. It is not necessarily included in all home insurance policies, and when it is, it is typically limited to a small fraction of the dwelling insurance amount. Madeline Hartnett, an artist living in the unincorporated area, described how she believed that the code upgrade coverage on her policy would apply to all additional costs to bring her home into compliance:

[Code upgrade coverage] covered the sprinklers but other things like this change to the trailer pad area was not covered. None of that was covered, and it's not in the policy, I had no recourse. I didn't know there could be that kind of distinction, you know? So, I mean, I'm thinking, "Oh, code changes, I'm covered," but (laughter) it doesn't cover outside stuff, so things like that weren't covered.

-- Madeline Hartnett, unincorporated area

Based on their lay understandings of the insurance contract, fire survivors believed

that provisions of their policies functioned to ensure that their policy limits would be accurate.⁴² Fire survivors perceived that the legal language and the limits were means to the end of full coverage. A comment by Amelia Lang, a retail store manager, best expresses the belief widely held among policyholders that the text of their policies is a means to the end of full coverage after loss: “now I really didn't understand the dollar amounts of the coverage and all of that. I assumed a lot that the insurance company would protect me.”

CHAPTER SUMMARY

Individuals who participate in transactions – without having deep experience with what a product functions to do – must largely rely on inferences drawn from superficially similar situations, personal interactions, and understandings of relevant law to form conceptions about what a product is, what it does, and how it could potentially fail. Depending on the structure of the economic field, inferences made on these grounds have the potential to support product misconceptions.

In the case of home insurance, 2003 San Diego fire survivors appeared to base their

42 These understandings may have been buttressed by insurance renewal routines, in which insurers permit homeowners to renew their policies by continuing to pay premium on higher and higher insurance amounts (when automatic increases are in place). The policy language and routines lend the impression that the status quo insurance value on their homes is sufficient – so long as no major undisclosed changes to the property have occurred. Industry groups have reported, based on public opinion surveys, that many homeowners do believe that it is their duty to contact their agent or broker if they make any major changes to the property Insurance Information Network of California, “Poll: Californians Overwhelmingly Recognize Personal Responsibility to Update Insurance,” news release, October 20, 2008, <http://www.iinc.org/articles/278/1/Poll--Californians-Overwhelmingly-Recognize-Personal-Responsibility-To-Update-Insurance/Page1.html>.

inferences about the function of home insurance as providing enough compensation to fully rebuild the homes they lost based on previous small claims loss experiences, on personal interactions with insurance agents, and on lay understandings of technical language in the insurance contract. Policyholders took it for granted that their agents and insurers, through offering and renewing “replacement” cost insurance, were able to commensurate their expectations of full coverage in the aftermath of total loss – where the tools by which insurers and agents did so were complicated algorithms of valuation that policyholders acknowledged they did not fully understand. Unfortunately, as demonstrated in the history of insurance chapter, policyholder expectations of full coverage (notwithstanding the deductible) are not realistic in light of the historic difficulties insurers have had with accurately estimating home replacement costs.

The 2003 San Diego fire survivors lost their homes after a long absence of major disasters in the region. Would the 2007 survivors, most of whom were probably living near the areas affected by the 2003 wildfires, have reported making similar inferences as the 2003 fire survivors about the sufficiency of their coverage? Since I did not interview 2007 fire survivors, I can only speculate.

In November 2003, one month after the fire, news stories started appearing in the local paper about how “many [fire survivors] have discovered there likely will be a gap between what their insurance covers and what it will cost to rebuild.”⁴³ Local media coverage of underinsurance problems faced by fire families was sustained over the next

43 Leslie Berestein, “Some victims now find their homes are underinsured,” *San Diego Union-Tribune*, November 14, 2003: A–1.

year.⁴⁴ In an effort to get the word out on the pervasive problem of underinsurance, and to motivate the Insurance Commissioner to enact legislation to resolve underinsurance and other insurance problems, a politically active group of fire survivors in Scripps Ranch took to wearing tee-shirts that read “I am underinsured and so are YOU!”⁴⁵ This is to say nothing of what 2003 fire survivors may have said informally to their neighbors and friends about their underinsurance problems.

Exposed to the news coverage and, potentially, to the stories of neighbors and friends who were underinsured in the 2003 fires, how might 2007 fire survivors have inferred – in the same way that 2003 fire survivors did – that their coverage would be adequate? Is it reasonable to think that despite these apparent sources of information about the potential for insurance to fail to provide full coverage, they too were subject

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- 44 David Fried, “Insurance Problems Linger in Fire Rebuilding Efforts,” *North County Times*, October 23, 2005; Quinn Eastman, “California Official Grills Insurance Companies on Underinsurance,” *North County Times*, October 22, 2004; Jeanette Steele and Leslie Berestein, “Homeowners worried over code proposals,” *The San Diego Union-Tribune*, January 10, 2004, http://docs.newsbank.com/s/InfoWeb/agddocs/AWNB/1000AB850C0C97DB/0D0CB57AB53DF815?s_lang; Jeanette Steele, “Crusader provides CARE to fire victims,” *The San Diego Union-Tribune*, January 18, 2004: B-1; Leslie Berestein, “Underinsured now fight for more funds,” *The San Diego Union-Tribune*, February 11, 2004: C-1; Mandy Jackson, “The Fires of 2003: One Year Later: Many Get Burned Twice: By Fire, Then Insurer,” *San Diego Business Journal*, October 18, 2004; Dean Calbreath, “\$1 billion paid out so far for October losses,” *The San Diego Union-Tribune*, February 18, 2004: C-1; Jeanette Steele, “Insurance shortfall - Burned-out homeowners grapple with big disparity between the estimates for rebuilding and the payouts,” *The San Diego Union-Tribune*, March 21, 2004: B-1; Jeanette Steele, “Insurance commissioner takes a little heat - Garamendi hears from October’s fire victims,” *The San Diego Union-Tribune*, April 24, 2004: B-1.
- 45 Jeanette Steele, “Insurance chief, fire victims to meet - They’re not happy - they have questions,” *San Diego Union-Tribune*, April 22, 2004, http://docs.newsbank.com/s/InfoWeb/agddocs/AWNB/10229AA55BADC08B/0D0CB57AB53DF815?s_lang.

to false certainty?

I speculate that it is reasonable – on two grounds. First, an article appearing in the San Diego Union-Tribune, less than a month after the 2003 fires, reported that insurance agents throughout the County have been “inundated with calls from clients who wonder if their coverage would be sufficient to rebuild after a disaster.”⁴⁶ An agent quoted in the article said that upon reviewing the homeowner's policies, she found very few that required upgrades. The article informed readers that “worried clients are getting reassurance more than insurance.”⁴⁷ This is consistent with allegations homeowners had made, during the course of the 2010 California Department of Insurance investigation into replacement cost calculation methodologies, that they had been reassured by their agents that their coverage would be sufficient. In fact, one San Diego long-term recovery coordinator, who worked in the field after both the 2003 and 2007 wildfires, noted that many of the underinsured fire survivors she helped in 2007 had approached their agents after the 2003 fire to see if they needed more insurance. She said that even though many of them had asked their agent for coverage increases, only 10 percent of 2007 fire survivors in her area were entitled to enough compensation under their policies to rebuild the homes they lost. And nearly all, by her estimation, were shocked to learn after the 2007 fire that their coverage would not be enough to rebuild.⁴⁸ This suggests both that false certainty was present among 2007 fire survivors and that

46 Rachel Laing, “Peace of mind: Recent fires have county residents rethinking their insurance policies,” San Diego Union-Tribune, November 13, 2003: C-1.

47 Ibid.

48 Interview with long-term disaster recovery coordinator, December 2012.

personal interactions with agents played a key role in supporting that condition of false certainty.

Second, it is important to note that much of the media coverage that aired about the insurance problems individuals faced after the 2003 fires contained comments from insurance industry spokesmen that minimized the scale of the underinsurance problem and individualized its causes. For example, one article in the San Diego Union-Tribune included a comment by a California Department of Insurance spokesman who said that “many people had not increased their insurance coverage each year, so they did not receive a large enough settlement to pay all their construction costs.”⁴⁹ Reading this, a person who has an “inflation guard” on their home insurance policy might think that they have avoided the primary cause of underinsurance. Another article, which reported on a meeting Insurance Commissioner Garamendi held with fire survivors contained a quote from Insurance Information Network of California spokesman Pete Moraga, who said “What you are not seeing here are all the people who are already in new homes or who have already settled.”⁵⁰ Indeed, in many of the news stories, industry spokesmen stressed that the vast majority of claims had been settled and that complaint rates were low⁵¹ – statements that at best, connote that the remaining unsettled claims are special exceptions, and at worst, that homeowners with those unsettled claims are difficult to

49 Jackson, “The Fires of 2003: One Year Later: Many Get Burned Twice: By Fire, Then Insurer.”

50 Steele, “Insurance commissioner takes a little heat - Garamendi hears from October’s fire victims.”

51 Calbreath, “\$1 billion paid out so far for October losses”; Steele, “Insurance shortfall - Burned-out homeowners grapple with big disparity between the estimates for rebuilding and the payouts.”

work with. The insinuation that individual policyholders are to blame for underinsurance is exemplified by this statement made by Candysse Miller, spokesperson for the Insurance Information Network of California: “It's common sense. If we're hearing construction costs are going up, you've got that opportunity any time, 365 days a year, to call your insurance agent to say, 'Is this appropriate? Is this current?’”⁵² The implication of some of these news stories is that underinsurance is an overblown problem that is avoidable through “common sense.” To the extent that 2007 fire survivors had been influenced by materials, they may have concluded, erroneously, that underinsurance is rare after disaster and that it is a problem faced only by individuals who do not contact their agents to “update” their policies.

Based on the content of media coverage of the 2003 fires, personal interactions with agents, previous partial loss experiences, and lay understandings of the home insurance contract, it is reasonable to speculate that, like 2003 fire survivors, 2007 fire survivors also had false certainty in the adequacy of their coverage. An investigation into the actual, as opposed to speculative, effects of a proximate previous disaster on false certainty – whether false certainty persists or does not persist – would be an excellent topic of future work.

It is important to note that the information environment that is accessible to consumers of insurance is awash with images in insurance advertisements that frame the insurer as provider of security, that portray insurance companies as acting with neighborly regard, and that dramatize the role of insurance agents and insurers in

52 Steele, “Insurance shortfall - Burned-out homeowners grapple with big disparity between the estimates for rebuilding and the payouts.”

providing rescue in times of greatest need. While the content of these advertisements may not be wholly to blame for mistaken consumer inferences, it would be remiss not to identify them as another source of information and meaning that – in light of lack of consumer experience with the outcomes of insurance following large loss – may contribute to consumer (mis)understandings about the actual function of home insurance in disaster contexts.

Theoretically speaking, the case of home insurance adds breadth to theories of information asymmetry, by demonstrating a case in which, despite a high degree of information asymmetry between sellers and buyers, low-information parties (buyers, in this case) are generally not suspicious of product quality. This finding contrasts with many contexts characterized by information asymmetry, in which the presence of information asymmetry causes parties with low-information to act in their transactions with suspicion.⁵³ Policyholders who have not experienced large losses tend to believe that insurance provides for full restoration in the event of total loss – even though they

53 George A. Akerlof, “The Market for ‘Lemons’: Quality Uncertainty and the Market Mechanism,” *The Quarterly Journal of Economics* 84, no. 3 (1970): 488–500. Akerlof describes how information asymmetry as a market condition affects prices and supply in the market for used cars, where it is unobservable to a potential car buyer whether a used car is good quality or whether it is a “lemon.” In this market, consumers have a distribution of probabilities regarding the likely qualities of cars on the market; this distribution also reflects the uncertainty with which homeowners view the expected outcomes of their decisions. Uncertainty leads buyers to downwardly adjust the amount they are willing to pay for a used car. Consequently, sellers of high-quality used cars are incentivized not to place their cars on the open market since they will not be able to realize the full value of the car in transaction; consumers are only willing to pay so much without knowing what to expect. Thus, the market becomes flooded with lemons, and distributions are even further downwardly adjusted in light of information on the outcome of these transaction experiences that yield mostly lemons.

lack the relevant information that could confirm or deny the accuracy of that belief.

Similarly, sociologists have tended to focus on problems of uncertainty and the productive resolution of uncertainty such that markets can persist. What has been much less frequently treated as problematic in economic contexts, and which is a problem I have aimed to highlight here, is the problem of false certainty: how experience, interactions, and information – in the absence of other kinds of experience with transaction outcomes and operations – can lead individuals to misunderstand products and services. While it may be true that in many economic contexts sufficient information about product outcomes and operations circulates in markets among the transacting public, and which leads individuals to reasonable expectations about likely transaction outcomes, the case of insurance demonstrates that such a condition is common but is certainly not universal. Home insurance is a ubiquitous product, yet it is largely misunderstood by most all who buy it.

CHAPTER 6: THE PRICE OF UNDERINSURANCE

We want to do the right thing by you. We want to do the right thing. Underneath that, though, is a contract. There are hard and fast parameters on this contract that we signed. If we open up here, if we offer something here, then we have to open it up everywhere and that's of concern. You know, other carriers just emphasize the contract itself. We try to go beyond that, we try to do more than that but at the end of the day, there is still the contract.¹

Many disaster-affected individuals interviewed in the aftermath of the San Diego wildfires perceived that the insurance compensation available to them under their policies was not enough to rebuild – a finding consistent with industry statistics, which have been published since the 1930s, that highlight the persistence of underinsurance. In this chapter, I ask just how exactly do inadequate policy limits have tangible repercussions for household recovery from total disaster loss? How might the findings presented here advance previous theory and research on the process and outcomes of household disaster recovery?

As this chapter will show, underinsurance had significant negative consequences for households who sustained a total disaster loss from the 2003 San Diego wildfires. Some individuals listed their inadequate policy limits as a major reason why they did not rebuild. For individuals who did rebuild, their recovery process was largely oriented

1 Interview with a company insurance adjuster, September 2008.

around closing the gap between their inadequate insurance coverage and rebuilding costs. The strategies that individuals adopted to try and close their home insurance gap often required plentiful time, skill, and emotional resilience. Not all individuals were successful. For many, resolving the gap between policy limits and rebuilding costs interfered with other life projects and routines. These findings complicate previous conclusions about the role of insurance in the household disaster recovery process; namely, these findings challenge the notion that recovery via insurance is largely a foregone conclusion for families insured for the loss-causing peril with reputable companies.

WHETHER TO REBUILD

Inadequate policy limits in replacement cost home insurance policies can leave individuals with insufficient compensation to rebuild their homes after total loss. Total loss survivors in this situation face a difficult decision: to attempt to rebuild in spite of inadequate insurance compensation, or to forgo attempts to rebuild at all. It is not a decision that can be taken lightly. Under the technical specifications of standard replacement cost policies, individuals who do not rebuild forfeit the replacement cost benefits of their policies and are entitled only the depreciated amount of their loss – up to the policy limits.

Some homeowners whose homes were completely destroyed in the San Diego wildfires explained that a major reason why they decided not to rebuild, and ultimately why they left the area, was that rebuilding would not be feasible for them in light of

their insufficient coverage. Karen and Carson Silbey had lived in their mountain community for many years prior to the fire. After the fire reduced their house to ashes, they learned that they were underinsured. Faced with their inadequate compensation, they “agonized” over the decision to rebuild. Ultimately, their inadequate insurance compensation was a deciding factor in their decision to leave.

What prompted you to move? Did insurance have anything to do with that?

Oh, absolutely!

Okay.

Because we knew that with what we settled for, that the money that we settled for was not going to rebuild our house.

-- Karen and Carson Silbey, unincorporated area

Another homeowner, Jillian Marlott, also found inadequate compensation to be an insurmountable hurdle in the rebuilding process. Jillian had lived alone for most of her life on some acreage in a moderate-income exurban community affected by the fires. After the fire destroyed her home, she intended to rebuild it exactly as it was before the fire. It was a home she had lived in with her siblings, when she was much younger. It was surrounded by trees and plants that she had tended for most of her life, when she worked as a landscaper. With her insurance proceeds, she hired an architect to draw up plans for the reconstruction of the home she had built herself. She even had the foundation poured. Despite her deeply felt commitment to getting her exact home back, she ultimately abandoned her home reconstruction efforts part way through the process. While her ailing health was a factor in her decision to move into an apartment in town, her decision not to rebuild her home was also based on her insurance compensation inadequacy:

And I know it would have cost quite a bit more beyond what I received in insurance, because costs really zoomed after that, maybe because of so many that were being [rebuilt], and there was a shortage of material hard to get.

-- Jillian Marlott, unincorporated area

The decision an individual must make after total loss about whether to rebuild may involve multiple considerations. Some of these considerations may include the residual value of the investment, the absence or presence of a mortgage (which comes due if homeowners decide not to rebuild), household circumstances that affect the difficulty of rebuilding (such as time, health, emotional constitution), risk perceptions, and attachment to place.² Insurance compensation inadequacy is not the only reason why individuals would decide not to rebuild, but it was certainly a factor affecting the decision of some San Diego disaster-affected homeowners.

MOBILIZING FINANCIAL RESOURCES TO REBUILD

Individuals who did try to rebuild in spite of inadequate insurance compensation faced a challenge. By rebuilding, they were committing to a resource-intensive project that could take a year or more and which could have little value in an unfinished state if they were unable to complete it. The decision to start out the rebuilding process with

2 After the 2003 San Diego fires, empty lots from fire burned properties sold well in Scripps Ranch, where new buyers saw rebuilding a custom home in an affluent, established neighborhood as an appealing opportunity. Yet, in rural and semi-rural areas affected by the wildfires, selling an empty lot was a more complicated prospect. First, the amenity value of the rural neighborhoods changed drastically after the fires, since the fires destroyed foliage and the secluded feel. Second, new buyers who sought to build a home on a fire-burned lot would have to comply with fire safe improvements that the city and county building departments were imposing on new construction in the aftermath of the fires that added significantly to building costs (i.e. paying the cost of installing a fire hydrant nearby).

inadequate insurance compensation meant that they anticipated that they would be able to resolve the residual rebuilding costs.

Individuals who lost homes in the 2003 fires reported having relied on the post-disaster recovery resources that are conventionally recognized as ways individuals overcome insufficient insurance compensation: savings and loans. Sometimes loan amounts were very large, as in the case of one woman whose underinsurance was so severe that she reported having to obtain close to \$100,000 in loans to replace her small house destroyed in the Cedar fire. A few fire survivors reported using personal savings to plow ahead with home reconstruction, worrying about settling with the insurance company after rebuilding costs had been paid. A strategy many homeowners used to finance the rebuilding process was to apply the compensation they received for losses in other categories of property besides the dwelling – such as compensation provided for personal property – toward rebuilding costs.³

Individuals faced with severe underinsurance scraped together financing from many different sources. For example, when I asked Karla Pendley – a woman who was struggling to support herself, her children, and her ill husband on a small income – how she was able to rebuild in spite of her underinsurance, she explained that she put all of

3 While policyholders used this strategy to get closer to the capital requirements for rebuilding, it sometimes came with financial consequences: by applying personal property compensation toward rebuilding rather than toward replacing belongings, it can inhibit policyholders from recovering the full replacement value of their personal property. Under replacement cost policies, in order to recover the value of personal property beyond its depreciated amount, policyholders are expected to replace the property first and then submit receipts. If policyholders do not replace their property and submit receipts, they are not entitled to collect the value of their property that was held back to account for depreciation.

her insurance money into her home reconstruction including compensation received for personal property and for other coverages like outbuildings. After pooling all of her insurance monies, she was \$150,000 short of being able to reconstruct a basic house. In order to finish, she had to take out loans and put all of her personal savings into the rebuild. Summing up her post-disaster situation bitterly, Karla declaimed: "I lost all my money."

Insured San Diego fire survivors did not generally receive FEMA grant money, since FEMA grants tend to be reserved for individuals without private home insurance. Yet, many did receive nominal assistance in the form of in-kind gifts and small grants through various sources. Some of these forms of assistance included official fee waivers in the permitting process; gift cards and discounts distributed through long-term recovery organizations; and small monetary gifts, used clothing, and used furniture from churches, nonprofits, clubs, and private individuals. Large grants distributed by charitable foundations and eligibility for home-rebuilding assistance programs were restricted primarily to households with extremely limited means.⁴

A couple of fire survivors believed that their contractors gave them below-market

4 To distribute grant money and enrollment in rebuilding assistance programs, the San Diego Firestorm Community Recovery Team convened local community based organizations and large disaster aid organizations for a monthly meeting to evaluate the needs of particular families in "case management" and make decisions about how best to prioritize aid distribution. According to one community organizer, who I interviewed in May 2008, households with insurance were considered lower priority than households with no insurance at all because case managers and the agencies they serve are really focused on the at-risk and elderly – "not on people who could manage their recovery on their own with support of family and friends and finding help from organizations." The fire survivors assisted through insurance consumer support groups are generally not the same fire survivors who are helped by the case managers charged with distributing charitable disaster aid.

reconstruction prices, by reducing profit margins, such that their homes could be rebuilt within constraints imposed by their insurance coverage inadequacy. These homeowners, after the fire, had interpreted what they perceived to be below-market pricing charged by their contractors as a form of charity rather than as the outcome of negotiation with their contractors. While discounted contractor fees may have worked out in some cases, the supposed favor sometimes backfired: contractors who underbid jobs in the aftermath of the fires sometimes went bankrupt and were not able to complete the construction jobs they had started. In one case, the contractor completed the home but used such poor quality materials that the homeowners began to notice problems a few years after the fire.

While savings, loans, and gifts are an important source of disaster recovery financing, these methods for overcoming the home insurance gap do not tell the whole story of how insured individuals recover from total disaster loss. Individuals who sought to rebuild after the San Diego fires often engaged in complex actions, in the shadow of the law and in the context of their social networks, to recover their homes in the face of inadequate insurance coverage. Financing recovery for many homeowners involved engagement in economic life beyond just completing loan applications, withdrawing savings, accepting acts of charity, and reallocating non-dwelling categories of insurance compensation to dwelling reconstruction. Financing recovery in the face of inadequate insurance involved activity oriented around not just around covering the gap with other sources of institutional financing, but also around minimizing the size of the home insurance gap itself.

ACTING TO MINIMIZE THE HOME INSURANCE GAP

In the aftermath of the San Diego wildfires of 2003 and 2007, households adopted one or more of three main strategies for minimizing the residual amount required for rebuilding beyond the amount the insurer was willing to pay: negotiating; barn raising; and downsizing. Negotiators were individuals who approached inadequate compensation by working through the insurance relationship, using practices drawn from business and law, to increase their insurance compensation in order to rebuild homes as good as the ones they lost. Barn raisers focused on harnessing the power of community connections and their own capacity for self-help to reduce their rebuilding costs far below market rates, and thus work within the tight constraints of their insufficient policy limits without sacrificing the amenity value of their homes. Downsizers coped with their home insurance gap by rebuilding a house that was less expensive to build than what it would have cost to rebuild a house similar to the one they lost. Each of these strategies had its particular costs, its benefits, its potential affordances and its potential risks. Each of these strategies bore differently on how households navigated, and to what effect, the post-disaster recovery of their homes and properties.

Negotiating

Negotiators approached the amount of their underinsurance as a quantity to be negotiated with their insurers. They almost universally believed that they were entitled to collect more compensation from their insurer than what they were offered – even if

offered compensation was the maximum payable under their inadequate policy limits.

Madeline Hartnett, a single middle-aged woman who lost a home in the unincorporated area, describes how the coverage limits under her policy would have enabled her to put up only the “sticks, plaster, and roof” but nothing on the inside. She had gotten an independent scope of loss that had come in well over her inadequate limits. Her coverage was inadequate in spite of the fact that she had opted for automatic increases to her limits on a yearly basis, she had code upgrade coverage, her home had been previously inspected by her agent, and she was rebuilding a home that was almost exactly the same size and internal quality as the one she had lost. She contended, with deep conviction, that she was entitled to insurance compensation that “should cover the cost of rebuilding the basic house with the same footprint, that's all.”

Scott and Adele Cooper, who had lost their home in the incorporated area, were convinced that the insurer was responsible for their underinsurance. They believed that their legitimate entitlements extended beyond the limits of their insurance contract:

I wrote a letter to the insurance company and I said to them, "We were underinsured. The reason that we were underinsured is that your, the people that were acting as your 'agent,' assured us that they would keep up with the cost of inflation, and they failed to do that, whether through negligence, incompetence, or whatever the reason might be, they failed to do that, and because they were acting as your agent, I hold [name of insurer] responsible for that." I also told them, "I understand it was our responsibility as the insured to make sure our home was adequately insured, however, I am not an expert in that area, and I have to rely on people who are. I assume that my insurance agency are experts in insurance, and that they do their due diligence to make sure that they are adequately covering our house. They failed to do that, and therefore my expectation is that [name of insurer] will pay us the actual cost regardless of coverage limits."

-- Scott & Adele Cooper, incorporated area

After considerable back and forth, which continued for years after the fire, Scott and Adele successfully negotiated an amount of compensation for their dwelling that satisfied them. They chose not to hire a lawyer or pursue litigation, though they were not opposed to it if it came to that, because they felt that lawyers can hinder compromise between two reasonable parties.

The insurance claim fundamentally involves establishing the old home's "worth," and the application of policy limits to that worth, such that the amount payable under the claim can be applied toward reconstruction of a replacement home. Homes destroyed in disaster often cannot be rebuilt to the same specifications, since it is difficult to duplicate exactly something that no longer exists and for which there may be limited detailed information about its composition. This problem is further compounded if the destroyed home was an older home that was grandfathered into current building code requirements or was built using materials no longer widely available.

To establish the basis of commensuration, insurers conduct a loss valuation whereby an adjuster or construction expert, acting on behalf of the insurer, calculates the value of the loss by reconstructing the home "on paper" and providing cost figures for components like labor and materials. When a company-supplied loss estimate is less than what the homeowner has reason to believe the loss is worth, a homeowner is advised by consumer advocates to document a value that he or she believes is more accurate in order to establish a starting point for settlement negotiations. Thus, a major step in the negotiation process for some homeowners following the 2003 wildfires was to secure a professional valuation of their loss using their own, independently hired

experts. In some cases, the independent valuation was established by securing contractor bids on the rebuilding job. In other cases, an independent valuation was generated by a contractor who specializes in loss valuation – the outcome of which is a document insurance consumer advocates call a “scope of loss.”⁵

Sally and Randall Marks, a couple living in the unincorporated fire-affected area, provide one example of negotiation. Before the fire, their insurer had sent them a letter increasing both their policy limits and premium basis. They thought they had adequate insurance coverage. The fire hit and they started exploring their reconstruction options. They realized that post-disaster construction costs would not be sufficient to rebuild their home, since construction costs were roughly double the \$70 per square foot that they were insured for. They informed their insurance company that they believed they were underinsured. Their insurer sent out an expert to establish a value for their

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- 5 It also helps a policyholder's negotiating position when he or she can show documentation that more coverage was requested prior to loss, but that coverage was not granted because the agent warranted the sufficiency of the coverage. But the inability to document that more coverage was requested does not preclude effective negotiation. Why? First, since many insurers transitioned their policyholders to capped policies from guaranteed replacement policies, insurance plaintiff attorneys have argued – often successfully – that proper notice was not given to policyholders. Policyholders who have had insurance with the same company for a long time, such that they once had guaranteed replacement policies, can be in a good position to negotiate depending on whether courts have found that their insurer gave improper notice in previous cases or whether their attorneys can make a novel legal argument about their insurer having given improper notice. A second reason is that, historically, there has been some legal ambiguity over the duties of insurers vis-à-vis policyholders: attorneys have successfully argued in some cases that insurers and their agents hold themselves out to be experts in valuation, and that in so doing, accept liability for those valuations. Other cases have been decided differently. In all attempts to negotiate, though, it is absolutely essential that policyholders who are underinsured establish the amount of their underinsurance through documenting the gap between their coverage and the amount it would cost to rebuild the home they had – a document often called a “scope of loss.”

destroyed home. After looking at pictures of the home provided by the couple and taking measurements of the burned out home footprint, the expert calculated the value of their finished hillside basement, which had a nice bathroom, bedroom, and living room at less than \$16 per square foot and calculated the second floor of the home at \$25 per square foot – amounts that are far, far below basic rebuilding costs. The expert valued the loss at exactly the amount of the policy limits, which was less than \$300,000.⁶ An insurance consumer advocate urged the Marks to arrange for an independent scope of loss in order to challenge the insurer's interpretation of the loss value. The independent scope of loss came in at over \$550,000. To compel their insurer to cover a greater proportion of their loss and surmount their inadequate limits, they engaged an attorney who was able to get their dwelling coverage amount raised by over \$100,000. According to the Marks, their eventual settlement was based primarily on the results of that independent scope of loss – a key negotiating tool that they did not realize they needed until a community advocate taught them of its value.

Having a scope of loss that shows a loss value in excess of policy limits, whether conducted by a loss valuation expert working on behalf of the company or on behalf of the homeowner, does not necessarily lead to a straightforward increase in insurance compensation. Nor does having bids from contractors to rebuild the house for an

6 Two other homeowners I interviewed for this project had this happen to them: the company-sponsored scope of loss that was generated after the fire came back with unrealistically low figures that came in at, or below, policy limits. According to one insurance plaintiff's attorney, it is not uncommon. In an informational meeting with wildfire survivors that was held in September 2008, he explained: "when there is an underinsurance issue, they sometimes try to use a phony estimate that lines up perfectly with the policy limit."

amount that far exceeds the policy limits. But, according to one adjuster, obtaining an independent loss valuation can help policyholders obtain additional claims compensation if the company valuation and the independent valuation are far apart.⁷

Ian Pembert, a married homeowner who lived in an incorporated fire-affected area, found that his insurer was initially unresponsive to his contention that the company-supplied loss valuation was woefully inadequate. The policy limits were well below his three contractor's bids. According to Ian, the scope of loss that the company had supplied had omitted 16 major items that significantly added to construction costs that totaled more than \$150,000. Since Ian had recently done extensive remodeling to his home, which the company had been made aware of when those remodels were finished, he had the ability and the desire to rebuild the home exactly as it was. He describes writing a series of lengthy letters over the course of many months, imploring his insurer to cover the costs. He considered the letters "legalese," which he said was not legalese "in terms of jargon, but in terms of how a lawyer would write a letter." When asked about how he was able to write letters like this, Ian explained how his specialized career experience equipped him with the ability to track and present detailed case histories and chains of events, and to communicate those details in the language of legal entitlement.

7 When asked about whether the involvement of an expert the policyholder has hired to produce an independent scope makes claim adjustment difficult, one company adjuster explained that when the company-supplied scope and the independent scope differ, the figures the company is willing to pay tend to creep up. "If the scopes don't jive, we look at the details and we look at what sort of trades are being made. You know, we take the approach that there is flexibility and movement on all of these things. The price never goes down. It always goes up with the process. It is a give-and-take, and we never get it right the first time. Maybe there are things that we missed, or things that the independent contractor that the homeowner had hired missed." Interview with a company insurance adjuster, September 2008.

Ian explained how this strategy works:

It's like, you have got to re-hash for these people, and you are letting them know that you are aware of every incident and every date, okay, and you are putting them on notice that this is an outline for something that is going to be trouble for you unless you be reasonable in response to it, and it worked.

-- Ian Pembert, incorporated area

Ian was a compulsive archivist of receipts and spreadsheets. During the interview, he flipped through binders, inches thick, which documented every aspect of his loss in painstaking detail and with near-professional formatting. He emphasized the amount of time and effort that went into preparing these records and how helpful they were in his efforts to negotiate with his company. He said he “felt sorry” for people with full-time jobs, since he felt that his retired status was what enabled him to engage fully with the insurance negotiation, the reconstruction process, and getting his mortgage company to release the insurance funds.

Indeed, negotiation required an enormous commitment from fire survivors. Fire survivors spent their time and energy learning about insurance regulations and insurance contracts, learning how to value their property independently, formatting information relevant to valuing their property such that it looks professional and thorough, engaging in lengthy back-and-forth communications with insurance representatives, and consulting with attorneys and other sources of information to better understand how to best protect one's interests.

Connie and Gary Danton, who lived in a moderate-income neighborhood in the unincorporated fire-affected area, perceived the insurance learning process as hard-earned. Gary, a machinist, recounts how he went to an insurance consumer support

meeting held in the area after the fire and how he was initially convinced that the consumer advocates were wrong about how long and involved it would be for them to rebuild their home with insurance compensation: “I didn't really believe everything he was saying...because, see, we had already built a house. We knew we could get this ... we built the house in four months, the first one, and he's saying 'It's a two-year ordeal.’” Gary was convinced that the advocate was “full of shit,” so he left, figuring that they could do it themselves. But they soon found themselves making little progress with their insurance company, which was adding time to their estimated rebuilding timetable. Gary said, “[A]nd I'd call, and call, and call, and call these people, and it was like talking to nobody.” So Gary turned to a book on the insurance process for help.

After reading the book, and recognizing some of the information the consumer advocates had tried to convey to him, Gary said he saw the insurance consumer advocates in a whole new light. He began to study up on insurance terms to see if he could make progress on his claim. He recalls his discovery of terminology at the back of his book:

So then I read the glossary, and it mentioned, in other words, my...my...what am I insured for? They call it 'certified limit.' So, I get on the phone, and I ask them if they could send me my certified limit at the time of my fire. [fingers snap] Bingo! I got it! Just like that, it was amazing. So I seen that worked so well, so then I started using their glossary for what I wanted, and things just went [snap, snap] and then, see, the intent, I wrote them a letter, our intent. And that was like 5 months, so I almost lost it. You know, 180 days, that's 6 months. And I wrote them a letter and I sent it certified mail to make sure they got it and I told them our intent. It was to rebuild our home in the same footprint, no more, no less....

-- Gary Danton, unincorporated area

Knowing how to use the precise insurance language to demand one's entitlements was

everything for Gary. Without that knowledge, Gary would not have been able to collect as much as he did to replace his home.

Jimmy Turner, a married homeowner in the unincorporated area, describes how much of his time and energy was spent contending with insurance-related difficulty that he felt was not ethically justified and that made his recovery more challenging than anyone around him really understood:

[T]he unfairness of it was the hoops, and the battles, and the letters, and the frustration, and everybody saying, "Why aren't you rebuilt yet? Everyone else is starting their rebuild?" I'm like, "I don't have the money to do it!" "What do you mean you don't have the money?" "Well, I'm battling with my insurance. You guys," speaking about my friends saying that, "You guys aren't going through what I am going through right now. Just back off. I know what I am doing. It's going to take forever to get this done..." ... I would go to meetings. I would go to community meetings. I would listen to people speak. They had experts come into the community from the Oakland Fires, and they said, "You need to contact this, and you need to go do this," I tried to go through FEMA. FEMA said, blah, blah, blah, "We'll help you out," and they never helped you out, you know, so I tried every single avenue that I could while remaining in contact with [name of insurer].

-- Jimmy Turner, unincorporated area

Negotiation tasks were an additional burden on quality of life, though among married couples, the claim-handling tasks were typically borne differently by men and women. Men tended to interface with contractors and adjusters who were charged with handling the dwelling part of the claim. Women were more often responsible for handling the personal property part of the claim: listing out household items that were lost and researching values for lost objects by going shopping or conducting online searches for similar items. Many women found themselves shouldering a greater proportion of the secretarial tasks involved in participating in the claim: filling out

claim paperwork, organizing it, producing it when called upon by their mates or adjusters, and waiting in line down at the County Department of Planning and Land Use to secure approvals or file documents. Silvia Broderick, a married woman who raised animals for food in the unincorporated part of the County due to the 2003 fires, describes the division of labor in her household:

He is not into paperwork at all. Trying to get him to do...That was part of the house problem, too, trying to get him to do any paper work is like you might as well just tie him up and try to hold him down because forget it....Because I didn't know exactly what questions to ask, you know, and that kind of stuff, or I would go down to the County and they would ask me stuff and I am going, "Well, I don't know what the answer is!" So it would have been easier if he would have jumped in, but he was too busy, so.

-- Silvia Broderick, unincorporated area

Negotiation was emotionally taxing, but so too was the prospect of not being able to restore one's home due to insufficient insurance compensation. At stake was their home. For some people, getting what they feel they were owed such that they could rebuild the life they had, and had spent their lifetimes building and saving to attain, was a fight for survival. As Jerilyn Anderson, a 2003 fire survivor from the unincorporated area, described the emotional side effects of her negotiation:

The whole thing was so traumatic. Everything you went to do was one big fight until you, you know--some days I'd cry, and I'm not a crier. Some days my husband and I would argue about something. It was just a tough life, and it was just all business, and fight for survival, is what it was. Fight for survival, and I'm a survivor.

-- Jerilyn Anderson, unincorporated area

Some homeowners reported eventually reaching a point where they felt that they could no longer negotiate to attain what they thought was fair – sometimes because the emotional toll was too great and sometimes because they believed that the offer on the

table would be difficult, if not impossible to overcome. Ben and Anita Hara, who earned a moderate income as commercial artists, recounted the five different adjusters the company used to handle their claim, all of whom said that the company would not pay beyond a certain amount. Ben said he threatened to take the company to court, and that afterward, an adjuster suggested arbitration. Ben and Anita participated in the arbitration, and accepted the offer on the table:

Anita: But I just wasn't up to a court case. I wasn't...

Ben: I was up to it!

Anita: I was not up to years ... of going through this. I wanted the money now, so we settled for less than probably what we would have got if we had sued them. . . .

-- Ben and Anita Hara, unincorporated area

It appeared that negotiation was an easier process for policyholders who had specialty insurers that catered to high-value homes and/or low-risk policyholders than for those policyholders with mainstream insurers that insured average homes. Given my data, it is not possible to tell the extent to which this apparent pattern can be explained by potentially better settlement practices of insurers that cater to premium risks or by greater capacity of high net worth policyholders to participate in complex negotiations.

Most fire survivors I interviewed who had made a sustained effort to negotiate were able to attain some compensation beyond the amount their insurers were willing to pay for their losses. Don and Kaitlin Kendall, who ran a small manufacturing business, considered the compensation they received as workable but “absolutely not” close to the amount listed on their scope of loss. I clarified a point Don had made about fairness, and he elaborated:

But in the end, you feel like it was a fair outcome after the arbitrator got involved.

Don: Right. The amount of money we got out of [arbitration] is what they probably should have given us before we got a lawyer involved.

Okay

Kaitlin: Compared to other people.

Don: It would have saved them a lot of money. We were happy with that amount.

Kaitlin: I don't think it is fair compared to what insurance owed us, that wasn't fair, but compared to other people's stories, we felt okay about our outcome.

-- Don and Kaitlin Kendall, unincorporated area

On one end of the spectrum, a handful of fire survivors were able to attain compensation through negotiation in an amount they felt mostly mitigated their underinsurance gap. One couple, living in the unincorporated area of the County and insured by a mainstream insurance company with a large market share, mostly overcame a gap between stated policy limits and projected rebuilding costs that exceeded \$100,000. They signed with a contractor, and waited to break ground until their claim was finalized. They wanted to know how much they would have to work with for rebuilding. It took them two years of dedicated work on their claim, seemingly endless back-and-forth negotiation, and the services of a lawyer before they settled \$10,000 shy of the figure listed on their independent scope of loss as the valuation of their destroyed home.

On the other end of the spectrum were two individuals, both of whom were living on restricted incomes, who had seriously endeavored to negotiate for additional compensation, but whose efforts failed miserably. Each was insured by a different insurance company and had hired a lawyer to help them negotiate settlements above their inadequate policy limits. In both instances, the lawyers dropped their cases after

pursuing legal action for some time. One subject contended that the reason the lawyer abandoned efforts to sue his company was that during the time the lawyer was handling his case, the particular insurance company had shown in other cases, which were further along, a willingness to incur exceptionally high cost to defend against suits and an unwillingness to negotiate. The other subject reported that her lawyer did not wish to pursue her case further, after having successfully negotiated some, but not all, compensation she felt she was owed. The fees of both lawyers were to be paid on contingency – a common arrangement in large loss lawsuits brought by consumers.

At the time of the interview, over four years since the Cedar fire, these two homeowners whose legal action had been, in their view, prematurely abandoned by their lawyers, had been unable to supplement their inadequate insurance compensation to rebuild. In fact, they were still living in recreational vehicles on their lots. They were saving, hoping, and scraping for a better day in the future when they could cobble together enough money to do so. They were probably not alone; just one year before, in the unincorporated part of the county, only 46 percent of the destroyed homes had been rebuilt. Of those, 19 percent had, at the time, been in the rebuilding process.⁸

Not everyone is equally equipped to negotiate a high-stakes business transaction effectively. A disaster context only compounds the difficulty. Individuals who have lost their homes are participating in a complex negotiation with a corporate actor, over a high stakes outcome, from the worst possible economic and emotional position: they are often devastated emotionally; they are contending with new routines in temporary

8 Anne Krueger, “Fire isn’t over for hundreds - Three years later, rebuilding continues for county residents,” San Diego Union-Tribune, The (CA), October 25, 2006: B-1.

housing that is unfamiliar and probably lower quality than the home they lost; they may be staying at some distance from their communities, schools, and workplaces; they are overwhelmed with tasks imposed not only by insurance but by local government and the requirements of rebuilding; and they are facing a ticking countdown clock imposed by their time-limited or dollar-limited additional living expense insurance benefits that cover disaster-related living expense increases.

A second factor affecting the outcome of attempts to negotiate higher claim payouts was the documentation fire survivors had available to prove their point about being entitled to more coverage. Jennifer Lyon and her husband Tim were able to negotiate above their policy limits, with the involvement of a lawyer, in part due to what she called a “golden paper.” Her agent, before the fire, had written down on a sheet of paper that the couple did not need more insurance. After the fire, the Lyons had access to that paper, which she believes helped her lawyer negotiate a higher payout on her behalf.

Negotiation often enabled policyholders to reduce the amount of their underinsurance gap – sometimes substantially and sometimes nominally. Insurance consumer advocacy organizations were instrumental in providing information and support to policyholders in their efforts. But reducing the size of the home insurance gap through negotiation was a hard-won success. Negotiators often engaged in extended periods of formal, legally-relevant, oral and written communications to invoke their legal entitlements. Policyholders sometimes stopped before pursuing what they felt they deserved because the unsettled claim interfered too much with their time, emotional health, and other life goals. Claim negotiation is taxing. Plaintiff’s attorneys and legal

scholars have argued in recent years that the claims settlement process – since the mid-1990s – has been designed intentionally as a gauntlet to save costs for insurers, since the difficulty involved in pursuing additional compensation leads claimants to give up before reaching the full extent of their entitlements under law.⁹

Whether the claim process deliberately imposes difficulty upon policyholders is beyond the scope of this analysis; however, it is clear that many fire survivors attempted to resolve their inadequate coverage under their policies through negotiation. The goal of negotiation was to reduce the size of the home insurance gap by compelling insurers to pay additional compensation, such that a greater proportion of the value of their loss would be covered.

Barn Raising

Barn raisers are fire survivors who – through their own labor, through volunteer labor of family and friends, and/or through using discounted construction materials – did some or all of the work to rebuild their homes. Where negotiators endeavored to reduce the size of their home insurance gap by working to increase the payout from their insurers, barn raisers aimed to reduce the size of the gap by reducing the costs of construction. These groups, however, are not mutually exclusive: a number of individuals both negotiated with their insurers to increase their payouts but also endeavored to reduce

9 David J. Berardinelli, *From Good Hands to Boxing Gloves: The Dark Side of Insurance* (Trial Guides, 2008); Jay M. Feinman, *Delay, Deny, Defend: Why Insurance Companies Don't Pay Claims and What You Can Do About It* (Penguin, 2010); Kelsey D. Dulin, "The Disaster After the Disaster: Insurance Companies' Post-Catastrophe Claims Handling Practices," *Oklahoma Law Review* 61, (2008): 189.

construction costs by doing some of the work themselves, especially when negotiation failed to generate enough compensation.

The barn-raising orientation toward overcoming the home insurance gap was taken up by underinsured fire survivors with varying degrees of intensity. For example, a number of rural fire survivors cleared their own lots of debris with the help of friends and family, or served as their own job site supervisors so that they could better monitor subcontractors. In other cases, underinsured fire survivors took a more involved role in rebuilding their homes to make up for their underinsurance gap: they served as their own contractors, did construction-related tasks such as heating, plumbing, and insulation, secured discounted or volunteer labor, and/or sourced discounted materials.

Barbara and Darnell Franks chose the barn-raising approach, because otherwise they felt they would not have been able to build what they had lost. Darnell was currently working in construction, and Barbara had previously built a home. After their attempts at negotiation produced just enough for them to put up a house based on their own labor, they settled. They describe the difference between “building with a phone” and doing much of the work on one's own:

Barbara: Yeah, building with a phone means you just go, "I want it."

Darnell: Yeah, you're not doing a single thing yourself, you are having it all done whereas we rebuilt her house, we rebuilt her house.

Daughter: Because we could, and thank goodness, or it would have been a lot different.

Darnell: Because I am in [the construction] business. . . . So we had a concrete company that we knew do the foundation, then we built the floor, and my guys framed the walls, and built the roof, and so we were involved in that, so we were able to do it within the cost of what they gave us but only because we got involved ourselves.

-- Barbara and Darnell Franks (with daughter), unincorporated area

Like negotiation, barn raising required particular skills and resources. Homeowners who adopted this approach tended to have construction skills or tended to rely on personal contacts who had such skills and equipment.

Barn raising was often a collective activity, involving family, friends, and acquaintances. Fire survivors could also participate in a group started by fellow fire survivors who were taking the same approach. The Cedar Fire Rebuilding Recovery Group (CFRRG) brought in speakers on construction-related topics, negotiated for and distributed information about discounts on construction-related materials and services to fire survivors, and offered a forum where fire survivors could exchange information and support. This group also cheered people on, celebrating milestones like plan approval, groundbreaking, and passage of final inspection. The group provided invaluable support to participating fire survivors during the long period of rebuilding via their own efforts.

Individuals who took a barn-raising approach to their underinsurance focused mainly on stretching their dollars as far as possible using their own time, energy, skill, and drawing upon neighbors, friends, and personal contacts to get rebuilding tasks completed on a shoestring budget. Silvia Broderick, a resident of the unincorporated area, found out after loss that she was insured for approximately \$75 per square foot. She indicated that she thought her policy was a guaranteed replacement policy. Through negotiation, including an independent scope of loss, she was able to get her limits raised to a certain extent. To make up the additional amount required to rebuild her home, and even make it a little nicer than what she had, she and her husband decided to lean on their community:

We had tractors at the farm. My 11-year-old had been driving all of them...So then over the years, and the other people were rebuilding, my husband volunteered with [name of local service organization] and worked on I don't know how many other people's houses. He did it every Saturday.

So is [name of local service organization] going to help you rebuild, then?

Yeah, they have already been out. They come out on Saturdays.

-- Silvia Broderick, unincorporated area

A benefit to the barn-raising approach is that while homeowners may have started out with policies that provided insufficient capital to rebuild what they had, it appears that at least some homeowners were able to rebuild homes that were as nice, if not a little nicer, than the ones they lost. Investing one's labor to not only overcome the home insurance gap, but also to add additional value to what may be the most important asset an individual will ever own, is not unlike the decision some fire survivors made to invest personal capital to do the same. Don and Kaitlin Kendall, fire survivors from an unincorporated area, gave me a tour of their rebuilt home. They considered it nicer than the one they lost. They did much of the construction work themselves and with family members because they were “underpaid” by their insurer, even after negotiating a settlement. While pointing out a custom feature, Don remarked:

And you see this here? I made all this by hand, all by hand. So that's how you can take a house if you do it yourself. You can get a lot more house for the money.

-- Don Kendall, unincorporated area

Barn raising had its drawbacks, though. Individuals who did much of the work themselves and focused on securing discounted labor and materials spent a lot of time and energy on rebuilding their homes, sometimes over many years, while staying in temporary housing. The Kendalls, for example, did not move back into their rebuilt

home for years after the fire, and were finishing up the construction at the time of the interview: four years later. The Lydells, who also lived in the unincorporated part of the county and who also used the barn-raising approach to coping with their inadequate compensation, were actively rebuilding and still had not attained the final inspection at the time of the interview. Recovery in the midst of underinsurance happened for barn raisers; but, it came at the cost of a slow, labor intensive process of scraping together discounts, new skills, and community assistance that left other life projects on the back burner.¹⁰

The reliance of disaster survivors on kin, friends, and other social ties as a source of recovery help has been recognized in previous disaster studies.¹¹ In the context of flood disasters, social ties have been conceptualized as a form of “informal insurance” that can compensate for the lack of flood insurance by allowing victims to draw on ready-made support networks to meet their financial, physical, and logistical needs.¹² Kin ties and close ties have also been discussed as a parallel structure to massive, formalized,

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- 10 Indeed, even while I was doing fieldwork in 2008, messages sent by barn raisers to the CFRRG listserv provided direct evidence that people were still rebuilding. They would send notices that they recently passed their final inspection or that they needed advice on a particular rebuilding issue.
 - 11 Thomas E. Drabek et al., “The Impact of Disaster on Kin Relationships,” *Journal of Marriage and Family* 37, no. 3 (1975): 481–494; Robert C. Bolin and Patricia Trainer, “Modes of Family Recovery Following Disaster: A Cross National Study,” in *Disasters: Theory and Research*, ed. by E. L. Quarantelli (London; Beverly Hills, Calif.: Sage Publications, 1978).
 - 12 Emily Chamlee-Wright and Virgil Henry Storr, “‘There’s No Place Like New Orleans’: Sense of Place and Community Recovery in the Ninth Ward After Hurricane Katrina,” *Journal of Urban Affairs* 31, no. 5 (2009): 615–634; John J. Beggs, Valerie A. Haines, and Jeanne S. Hurlbert, “Situational Contingencies Surrounding the Receipt of Informal Support,” *Social Forces* 75, no. 1 (1996): 201–222.

complex organizations that characterize post-industrial society – structures that play an important role in family life, especially in the aftermath of disaster.¹³ Policyholder reliance on mutual assistance and community ties demonstrates that the institution of insurance has failed to fully supplant traditional forms of mutual assistance that existed prior to the advent of the insurance institution.

Just like negotiators, barn raisers dealt with their underinsurance gap with a strategy that involved significant time, effort, patience and expertise. Except instead of the legal and institutional resources negotiators drew upon in their efforts to negotiate, barn raisers relied upon community, construction know-how, and self-help. There did not appear to be a trend in barn raising by education: a some individuals who did much of the work themselves had college degrees, and in some cases, even advanced degrees. Though one pattern did emerge: individuals I interviewed who engaged in self-help tended to live in the rural and semi-rural areas of the County. It seemed that the kind of people who chose to live in a somewhat rural area also tended to be the kind of people who could marshal the skills and/or contacts to reduce their building costs significantly.

Downsizing

Downsizers are fire survivors who, in the face of being entitled to inadequate insurance compensation, built homes that were smaller or lower quality than the ones they had lost. They rebuilt, in spite of their underinsurance, by rebuilding a home that fit within the tight constraints of their very limited financing.

Gertrude Lund, an elderly woman who had lived in her house before the fire with an

13 Drabek et al., “The Impact of Disaster on Kin Relationships.”

elderly relative, replaced the two-story home she lost with a much smaller one-story home. She reported that her rebuilding objective was to not take out any loans, since she was on a fixed income and could not afford to pay them. In her words:

I had told the builders that I had this much money and I had to keep it within that range because I didn't...I couldn't afford a mortgage, and so we did. I owned the house to begin with so I didn't have a mortgage and they built within the funds that I had...it cut down the living space but we didn't notice any difference because we never used the upstairs anyway,
-- Gertrude Lund, unincorporated area

Karla and Charles Pendley, after putting all their personal savings, all their contents money, and a \$150,000 loan amount into the reconstruction of their home, were only able to rebuild once the contractor cut his profit in order to rebuild them a house. In exchange for the contractor's discounted price, they were not permitted to select any of the finishings in their home. It did not work out as well as they had hoped: Karla suspects that, besides utilizing flexibility in the choice of colors and textures of finishings to save costs, the contractor cut corners on the quality of the materials he used to build the house. Just two years after construction was complete, they started having problems with peeling paint, cracks in the tile, and deteriorating grout.

Ben and Anita Hara, a couple who had lost a home in an unincorporated part of the County, coped with their residual underinsurance – after attempting to unsuccessfully eliminate their underinsurance through negotiation– by replacing the log cabin they lost, which had a loft, with a manufactured home. While the decision very likely marked a reduction in the value of their property, since manufactured homes have diminished resale value in comparison with wood frame houses, it was a decision they felt they could live with: they perceived that a manufactured home to be easier to insure and

easier to obtain the appropriate permitting through the County.

Downsizers found some semblance of recovery after the 2003 fires: they rebuilt their homes without having to devote significant amounts of time to doing it themselves. Unfortunately, their recovery came at the expense of the value of their rebuilt home vis-à-vis the homes they lost. A custom home is worth more than a manufactured home purchased out of a catalog; a two-story home is worth more than a smaller one-story home, all else equal; a home built with quality materials that stand the test of time is worth more than a deeply discounted home that shows signs of age well beyond its two years.

PREDICTING STRATEGIES

What explains why people adopted one strategy for coping with underinsurance over another? Social class distinctions provide only a partial answer. Negotiators, as a group, were a fairly heterogenous bunch: some lived in the suburban areas, while others lived in the rural areas; some had education beyond high school, while others did not; some earned an upper middle income, while others earned a lower middle income. It would not be easy to predict, in advance of a disaster, who would negotiate and who would not on the basis of demographic characteristics. Negotiators were united in a belief that they were entitled to more than what their insurer offered them and united in their willingness to put the time and effort into fighting their insurer's interpretation of its financial liability for their loss. Some were better able to carry out their negotiation strategies than others, based on their resources. But negotiation attempts did not neatly

follow class lines.

Barn raising, as a strategy, did appear to more closely follow class lines – where class is understood more in terms of occupation than simply income and education. Barn raisers all tended to have previous experience in home construction and/or were well connected through personal ties to those who did. Aside from an architect I interviewed who lived in an incorporated fire-damaged area, barn raisers lived almost exclusively in the semi-rural and rural areas of the County. Income and education did not seem to be a very good predictor of barn raising. For example, while I did interview a former electrician, a construction site foreman, and a housing component manufacturer who handled much of the reconstruction work themselves, I also interviewed a research scholar who adopted the barn-raising approach without having prior experience. Indeed, when attending the Cedar Fire Rebuilding Resource Group (CFRRG), a local support group through which fire survivors could exchange information and even their own labor to help fellow group members, I met individuals who were learning about construction through their own efforts to rebuild their homes.

Downsizers, defined as those individuals who rebuilt less expensive homes in order to stay within the confines of their underinsurance, are the one group for whom social class seems fairly predictive of their recovery strategy. Downsizers appeared to have little capital or credit to make up their insurance gap and seemed unable to participate in the intensive requirements of negotiating or barn-raising due to life circumstances like ailing health, advanced age, or caregiving responsibilities. Rebuilding a smaller, less expensive home was, for them, a way of getting back into their home as efficiently as

possible. No doubt there were people living in the incorporated areas who had limited ability to acquire financing for reconstruction and/or limited ability to participate in the negotiation process; however, residents of the incorporated area had a key resource that their counterparts in the rural areas did not. Their land could be sold at a good price. Burned lots in Scripps Ranch were selling well after the fires. Therefore, individuals living in the incorporated areas who could not participate in negotiations nor raise their own barns were probably more inclined to sell their lots and move elsewhere, rather than rebuild on the same plot – leaving downsizing as a strategy that was perhaps taken mostly by those with limited resources.

But while social class is not the best predictor of all the strategies individuals used to overcome their inadequate insurance, there is some reason to believe that social network analysis would hold promise as a way of predicting recovery strategies. Based on my observations of community recovery activities and interviews with policyholders, there is no doubt that the strategy of negotiation diffused through local social networks of neighbors, through community recovery centers, and through advocacy organizations. Insurance advocacy organizations actively promoted claim negotiation among their clients and encouraged their clients to get the word out to their neighbors about policyholder legal entitlements and how to invoke them. People reported hearing about insurance education meetings from a friend or neighbor, having attended for the first time, and having decided that they would negotiate. A similar phenomenon can be seen with downsizing: organizations like the Cedar Fire Rebuilding Resource Group disseminated barn-raising as a viable approach to rebuilding one's

home. Some of the community recovery centers in the rural areas organized volunteer labor to help clear away the debris and to help policyholders begin the rebuilding process.

CHAPTER SUMMARY

Underinsurance is a latent situation for most home insurance policyholders; however, the negative consequences of underinsurance are manifest only for the small fraction of policyholders who sustain a total (or very large) loss. Underinsurance was a contributing factor in the decision some San Diego wildfire-affected homeowners made not to rebuild their homes. For homeowners who did attempt to rebuild, recovery activities were largely organized around making up the home insurance gap through negotiating, barn raising, and downsizing. Attempts by homeowners to resolve their home insurance gap were not always successful.

The fieldwork presented here extends previous disaster research in three ways. First, most contemporary treatments of disaster recovery financing have generally portrayed the resolution of inadequate insurance as mostly a matter of drawing upon savings or taking out loans. Yet, this chapter aims to show that not only do disaster-affected homeowners rely on savings and loans to cover their home insurance gap, but they also often actively reduce the size of their insurance compensation gap through using their community resources to lower rebuilding costs below market value and/or acting in the shadow of legal institutions with their insurers to raise their available compensation. Activities taken to manipulate the size of the insurance gap constitute a large part of the

home rebuilding recovery process for households, and this activity can interfere significantly with other life projects and endeavors.

Second, some scholars of disaster have contended that use of the legal system by disaster victims largely hinders rather than helps disaster recovery. For example, one Katrina scholar has argued that the blame disaster victims placed – 16 months after the disaster – on insurance companies, contractors, police, and others involved in initial reconstruction as the “blame game.” The “blame game,” he argues, is part and parcel of corrosive community processes that inhibit broader disaster recovery. In his view, lawsuits against insurers – which can be protracted – only prolong community recovery and bring negative health effects.¹⁴ This insight follows the observation made by Kai Erikson who contended that the Buffalo Creek Flood was corrosive to community, in part due to the legal action disaster survivors pursued after the event.¹⁵ Yet, as this chapter has aimed to show, household disaster recovery requires mobilizing resources that make recovery possible – which includes resources of a business and legal character. The instrumental ways individuals use law to pursue compensation from insurers should not simply be fingered as a cause of slow recovery, but should be considered part of what is required for individuals to recover financially from total disaster loss in the current home insurance climate of inadequate policy limits. While it

14 J. Steven Picou and Brent K. Marshall, “Katrina as a Paradigm Shift: Reflections on Disaster Recovery in the Twenty-First Century,” in *The Sociology of Katrina: Perspectives on a Modern Catastrophe*, ed. by David L. Brunson, David Overfelt, and J. Steven Picou (Rowman & Littlefield, 2007); J. Steven Picou, Brent K. Marshall, and Duane A. Gill, “Disaster, Litigation, and the Corrosive Community,” *Social Forces* 82, no. 4 (2004): 1493–1522.

15 Kai T. Erikson, *Everything in Its Path: Destruction of Community in the Buffalo Creek Flood* (Simon and Schuster, 1976).

may be true that pursuing legal battles, in some cases, can prevent individuals and communities from moving forward after disaster, in other cases it is precisely their use of the legal system that enables individuals to restore their homes and lives.

Third, the capacity of households to recover economically, given the high proportion of wealth individuals have wrapped up in their homes, is tied to their ability to recoup the home and property value they lost in the disaster.¹⁶ Home insurance has been identified within disaster research as a crucial resource for household and housing disaster recovery.¹⁷ As previous disaster research has pointed out, the benefits of home insurance are not evenly distributed across the social body. For example, racial and ethnic minorities are less likely to have insurance,¹⁸ and when they do have insurance, they are more likely to have insurance through disreputable insurers due to redlining – which can lead to low payouts in the aftermath of loss.¹⁹ Poor and minority households

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- 16 Robert C. Bolin and Lois Stanford, “Constructing Vulnerability in the First World: The Northridge Earthquake in Southern California,” in *The Angry Earth: Disaster in Anthropological Perspective*, ed. by Anthony Oliver-Smith and Susannah M. Hoffman (Psychology Press, 1999); Mary C. Comerio, *Disaster Hits Home: New Policy for Urban Housing Recovery* (University of California Press, 1998); Susan L. Cutter et al., “The Long Road Home: Race, Class, and Recovery from Hurricane Katrina,” *Environment* 48, no. 2 (2006): 8–20.
- 17 Comerio, *Disaster Hits Home*; Walter Gillis Peacock and Chris Girard, “Ethnic and Racial Inequalities in Hurricane Damage and Insurance Settlements,” in *Hurricane Andrew: Ethnicity, Gender, and the Sociology of Disasters*, ed. by Walter Gillis Peacock, Betty Hearn Morrow, and Hugh Gladwin (Routledge, 1997); Robert C. Bolin, *Long-term Family Recovery from Disaster* (Institute of Behavioral Science, University of Colorado, 1982).
- 18 Tom Baker and Karen McElrath, “Whose Safety Net? Home Insurance and Inequality,” *Law & Social Inquiry* 21, no. 2 (1996): 229–264; Walter Gillis Peacock, Nicole Dash, and Yang Zhang, “Sheltering and Housing Recovery Following Disaster,” in *Handbook of disaster research*, ed. by Havidán Rodríguez, E. L. Quarantelli, and Russell Rowe Dynes (New York: Springer, 2006).
- 19 Peacock and Girard, “Ethnic and Racial Inequalities in Hurricane Damage and

have also found that insurance payments are not adequate to meet repair and reconstruction needs.²⁰ Generally speaking, problems with inadequate insurance compensation in the aftermath of loss have been attributed, by disaster researchers, to the absence of a policy for the loss-causing peril or to having insurance through a disreputable carrier – problems that disproportionately affect socially vulnerable groups.

But what about homeowners who have standard insurance policies through reputable insurance carriers? Previous scholarship seems to suggest that these households tend to have satisfactory post-loss insurance outcomes. For example, one study reported that of homeowners whose homes sustained disaster damage by Hurricane Andrew and who had insurance through a company that constituted the top-three – Allstate, State Farm, or Prudential – over 90 percent of all homeowners and 85 percent of Black homeowners said they had received enough money to cover repair costs.²¹ While it is likely still the case that socially vulnerable groups have worse insurance outcomes compared to their more advantaged counterparts, previous conclusions about the role of insurance in disaster recovery in the best cases have warranted re-examination. The well-studied disasters that have been used to draw

Insurance Settlements.”

- 20 Peacock, Dash, and Zhang, “Sheltering and Housing Recovery Following Disaster”; Bolin, Long-term Family Recovery from Disaster; Robert C. Bolin and Patricia A. Bolton, “Race, religion, and ethnicity in disaster recovery,” Program on Environment and Behavior, no. 42 (1986), <http://bases.bireme.br/cgi-bin/wxislind.exe/iah/online/?IsisScript=iah/iah.xis&src=google&base=DESASTRES&lang=p&nextAction=lnk&exprSearch=10632&indexSearch=ID>.
- 21 Peacock and Girard, “Ethnic and Racial Inequalities in Hurricane Damage and Insurance Settlements”; Peacock, Dash, and Zhang, “Sheltering and Housing Recovery Following Disaster.”

conclusions about the operation of insurance in disaster – Hurricane Andrew and the Northridge Earthquake – occurred in a unique period in the history of U.S. property insurance: years in which many policyholders were insured with guaranteed replacement policies. At present, under an insurance system that makes only policies with caps available to most homeowners, this chapter aims to show how even disaster-affected policyholders with policies through reputable companies for the loss-causing peril face disaster recovery difficulties.

There has been little focused research on the financial effects of disasters on individuals and families – an unfortunate oversight given the complexity of the recovery process involving insurance, SBA loans, and disaster grants.²² Little attention has been paid to the relationship between personal qualities – such as experience, education, and skills – and the extent to which individuals and households can partake in the many processes required for responding to and recovering from disaster.²³ The U.S. Geological Survey and the National Science Foundation entered a partnership in 2008 to address this oversight, aiming to promote research on processes involved in community and household resiliency and vulnerability. A key question identified in that project is how households transition through the recovery process and what role different forms of aid, including savings, insurance, grants, NGO programs play in the disaster recovery process.²⁴ The fieldwork presented here contributes to this endeavor

22 Alice Fothergill, *Heads Above Water: Gender, Class, and Family in the Grand Forks Flood* (SUNY Press, 2004).

23 Betty Hearn Morrow, “Identifying and Mapping Community Vulnerability,” *Disasters* 23, no. 1 (1999): 1–18.

24 Walter Gillis Peacock et al., *Toward a Resiliency and Vulnerability Observatory Network: RAVON* (2008),

by examining the role of insurance in household disaster recovery.

The results presented here are also of interest to new institutional scholars. New institutional scholars have ascribed the rise of insurance, and other financial institutions, to the decline of process-based trust that occurred as a consequence of modernization.²⁵ Large, bureaucratic organizations that have grown and multiplied since the Industrial Revolution have “absorbed” the functions that were once performed by family, small groups, and small organizations.²⁶ As individuals moved more frequently and were exposed to more diverse populations, the mutual assistance provided by members of the social body to one another declined. In its stead emerged institutional intermediaries in trust, such as banks and insurance companies, which became trusted, legitimate alternatives to obtaining assistance from fellow citizens, neighbors and friends in times of need.²⁷ Yet, this case suggests that while insurance may not be a wholesale institutional failure due to the potential for insurance to adequately replace property in more frequent, partial losses, there is a persistent mismatch between policyholder conceptions of the function of insurance and its actual function in total losses. Insurance fails to perform as expected in the instances when it is needed most. Inadequate compensation of large disaster losses reveals that private property insurance does not fully supplant the kind of self help and neighborly assistance that insurance, as a form

archone.tamu.edu/hrrc/publications/researchreports/RAVON.

25 Lynne G. Zucker, “Production of Trust: Institutional Sources of Economic Structure, 1840–1920,” *Research in Organizational Behavior* 8, (1986): 53–111.

26 Charles Perrow, “A Society of Organizations,” *Theory and Society* 20, no. 6 (1991): 725–762.

27 Zucker, “Production of Trust.”

of institution-based trust, emerged to replace. The success with which insured policyholders pursue rebuilding in the absence of sufficient insurance coverage depends fundamentally on their access to resources besides insurance – where one of the resources some individuals rely upon to recover their homes and routines is the mutual assistance for which insurance was supposed to substitute.

The system of private home insurance has been recognized by disaster researchers and insurance scholars as being afflicted by particular problems: home insurance coverage is unequally available to all members of the social body, optional home insurance coverages suffer from relatively low uptake, and home insurance is becoming increasingly unavailable in high-risk areas. The uneven distribution of insurance – along with the uneven distribution of other kinds of resources that are useful following disaster – have been held responsible for major inequalities in disaster recovery outcomes. This chapter has argued that even in the best cases, where individuals are insured for a loss-causing peril that lies at the heart of home insurance (fire) and where they are insured with reputable companies, replacement cost dwelling insurance does not live up to its expected function in total losses due to insufficient insurable values. Collecting enough insurance compensation in the aftermath of loss to rebuild one's home – even for individuals who have unambiguous coverage for the loss, who have a replacement cost policy, and whose carrier is a mainstream company – is not a foregone conclusion.

CHAPTER 7: CONCLUSION

Individuals in the market for home insurance tend to exhibit what I call “false certainty” in product function: they believe that insurance covers the full costs of dwelling reconstruction – despite longstanding persistence of inadequate home insurance-to-value. The manifest consequences of false certainty in home insurance function, as demonstrated by the aftermath of the San Diego wildfires, is that individuals who find themselves in the unfortunate position of sustaining a total disaster loss are shocked to find themselves struggling to overcome a home insurance gap if they wish to rebuild.

The findings of this study add breadth to theories of information asymmetry in markets and extend theories of cognition and culture. The market for home insurance suffers from what can be understood as a market failure: replacement cost home insurance policies often fail to provide what policyholders expect after a covered total disaster loss. This market failure is accompanied by information asymmetry between insurers and policyholders regarding coverage quality: insurers have long recognized that policy limits are insufficient to enable policyholders to rebuild after a covered loss, yet policyholders tend to believe that their policies are sufficient to do just that.

Most previous analyses of information asymmetry in markets, aside from some exceptions,¹ predict that low-information parties are suspicious about the quality of goods and services. In other words, they perceive uncertainty. Yet, this dissertation demonstrates a case in which – despite a high degree of information asymmetry – individuals are largely unsuspecting about the purpose and performance of the home insurance product in covered losses. As such, this dissertation demonstrates that uncertainty is not the only problem that contributes to market problems– so too does “false certainty.”

Just as uncertainty can lead individuals in ways that do not promote well-functioning, efficient markets, so too can the problem of false certainty. In the case of home insurance, the so-called failure of policyholders to “update” their policies frequently and the tendency of policyholders to equate the replacement cost supplied by the company as a statement of home replacement value – rather than as a probably incorrect estimate – can be understood as behaviors that stem from false certainty in the function of their home insurance to cover their losses in the ways they expect. To understand policyholder actions in the home insurance market as negligent or as simply reflecting the outcome of cost/benefit calculations does not account for how policyholders understand the nature of the insurance product itself and how their actions can be sensible in light of those understandings.

This dissertation has also theorized about the particular conditions under which false

1 Henry B. Hansmann, “The Role of Nonprofit Enterprise,” *The Yale Law Journal* 89, no. 5 (1980): 835; Burton Allen Weisbrod, *The Nonprofit Economy* (Cambridge, Mass.: Harvard University Press, 1988).

certainty can accompany information asymmetry in markets. False certainty in home insurance is made possible because policyholders have neither experience nor knowledge that promotes skepticism about the potential for their home insurance product to fail to provide what they expect after a covered loss. Individuals expect a “best case” of insurance coverage after loss, where the “best case” is understood by homeowners in this situation as the very function of home insurance.

The meaning of home insurance held by many policyholders – which is that home insurance is a product that, at its core, functions to fully cover the costs individuals incur to rebuild their homes and restore their lives in the event of a covered loss – is supported by personal interactions, analogical reasoning, and the legal consciousness of contracts. These understandings are also supported by the content of media, where, on the one hand insurance advertisements connote the idea that insurers are trusted entities who put people back together again after losing everything, and on the other hand, news stories individualize the causes of, and minimize the scope of, insurance coverage insufficiencies following disaster. How policyholders understand what their insurance coverage will do stems from the history of their experiences in the field of insurance.

The problems of uncertainty in markets can be understood as the outcome of particular social and historical conditions specific to those markets. In many markets, individuals who participate have acquired enough knowledge, from living in the social world and having particular kinds of experiences, that cause them to be uncertain about the quality of unobservable or complex goods and services. Essentially, they have enough experience – direct or indirect – to recognize the inherent uncertainty they face

in their transactions. But while this may indeed describe many, if not most, markets, the case of home insurance reveals that – under certain conditions – information asymmetry can lead to “false certainty.”

The findings of this study complicate conclusions previous researchers have reached about the role of insurance in household disaster recovery. Previous scholars have suggested that recovery from disaster through insurance, for policyholders with insurance policies with reputable insurers, is a foregone conclusion. Moreover, these studies have stressed that individuals largely finance gaps between their insurance compensation and rebuilding costs through use of personal savings and loans. Individuals and households who sought recovery from the San Diego wildfires, who by most standards would be considered the relatively advantaged – since they owned homes and had replacement cost insurance policies through mainstream companies – struggled to overcome the gap between their insurance policy limits and their rebuilding costs. Besides taking out loans and using personal savings, policyholders engaged in three general strategies to reduce the size of the gap itself: negotiation, barn raising, and downsizing. This study has suggested that previous conclusions about the role of home insurance in disaster recovery may be out of date, since many previous studies were conducted in a unique period in the history of the home insurance market: widespread guaranteed replacement.

At the crux of home insurance is the effort by insurers to value properties – in order to accept, price, and manage risks. The history of home insurance provides an example of the limits of valuation technologies to overcome complexity and uncertainty –

institutionalized as those technologies may be. In the case of home insurance, the strategies and technologies insurers have used to assign insurance values to homes have been limited by the complexity and uncertainty involved in generating a valuation that will be sufficient under some unknown future condition. As such, the case of inadequate home insurance property valuation contributes to literature in economic sociology that highlights the complexities of valuation in areas where valuation is difficult to produce.

THE SOCIOLOGY OF INSURANCE

How does this research fit in to the small but growing subfield known as the “sociology of insurance”? The sociology of insurance focuses on the institutions and practices that address risk, and how these particular institutions and practices affect other social institutions.² To date, there are two main strands of sociological research on insurance institutions. The first strand consists of studies that focus on insurance as a site of commensuration. Scholars in this tradition ask how insurance, fundamentally understood in this literature as a commensuration of non-economic values with monetary value, is made legitimate through the actions of institutional entrepreneurs in particular cultural and historical settings. The second strand approaches insurance as risk management practices that relatively constrain and enable the freedoms enjoyed by individuals and organizations. This dissertation unites insights drawn from both of these strands.

Viviana Zelizer, in her study of the early life insurance industry, showed how

2 Tom Baker and Jonathan Simon, *Embracing Risk: The Changing Culture of Insurance and Responsibility* (University of Chicago Press, 2002).

institutional entrepreneurs, faced with cultural taboos on equating human life with monetary value, employed cultural communications to frame life insurance as morally appropriate.³ According to Zelizer, institutional entrepreneurs managed the meaning of life insurance over time such that it could become consistent (and stay consistent) with broader cultural values. In some periods, insurers stressed life insurance as sound business; in others, insurers framed the life insurance product as functioning to provide care to widows and orphans.⁴ For Zelizer, the particular meanings of life insurance that were communicated by institutional entrepreneurs at the dawn of the life insurance industry – in tandem with broader cultural changes including recognition of the economic value of death – constituted an essential basis of the industry's legitimacy.

Zelizer's insights about the early life insurance industry have been made in contemporary contexts. Sarah Quinn, writing about the secondary market for life insurance, has extended Zelizer's work to show how the commensuration of life and money has become even further institutionalized in the years since the early life insurance industry.⁵ Investors trading in life insurance policies, which are investment products called “viaticals” for the terminally ill and “life settlements” for the wealthy aged, benefit from an insured's early death and suffer financially by an insured's longevity. Despite competing logics of the moral appropriateness of the secondary

3 Viviana A. Rotman Zelizer, *Morals and Markets: The Development of Life Insurance in the United States* (Transaction Publishers, 1979).

4 *Ibid.*

5 Sarah Quinn, “The Transformation of Morals in Markets: Death, Benefits, and the Exchange of Life Insurance Policies,” *American Journal of Sociology* 114, no. 3 (2008): 738–780.

market for life insurance, the growth of the market demonstrates a cultural shift in a taboo that once constrained the life insurance industry.⁶ Cheri Chan, in her study of the emergence of the life insurance market in China, argued that insurance organizations had to adapt communicated meanings of life insurance to account for cultural concepts of life and death that were incompatible with the idea of life insurance as a vehicle for managing unexpected misfortune.⁷ The success of the life insurance industry in China, according to Chan, can be largely attributed to the marketing of life insurance as a money management – not a risk management – product.⁸

Viviana Zelizer, Sarah Quinn, and Cheri Chan have highlighted an important problem in new insurance markets: how non-economic values become recognized as legitimately commensurable with money. Individuals seeking to build new insurance markets may have to navigate conflicts between morals and markets in the marketing and sale of insurance products. Their contributions suggest that if a market is to be successful, market participants must explicitly come to accept a commensuration between the non-economic value (i.e. life in the case of life insurance) and money, as legitimate – or the insurance product must be defined in ways that circumvent that conflict. Through managing meanings, institutional entrepreneurs play a key role in establishing and maintaining the legitimacy of insurance products.

6 Ibid.

7 Cheri Shun-ching Chan, “Invigorating the Content in Social Embeddedness: An Ethnography of Life Insurance Transactions in China,” *American Journal of Sociology* 115, no. 3 (2009): 712–754; Cheri Shun-ching Chan, *Marketing Death: Culture and the Making of a Life Insurance Market in China* (Oxford University Press, 2012).

8 Chan, “Invigorating the Content in Social Embeddedness.”

While sociologists in the first strand focus on how people, property, and events become insurable, and thus commensurable, sociologists in the second strand have focused on how insurance relatively constrains (and enables) individual and organizational freedom through risk management routines and practices. Carol Heimer's study of the property insurance industry centered on how insurers control policyholders in order to manage risk.⁹ Since the presence of an insurance policy can create incentives for individuals to cause (or at least fail to prevent) loss, and the intention to cause loss is not readily observable, the risks insurers face are “reactive.”¹⁰ Insurers attempt to “fix” their reactive risks, and thus make them more calculable, by using strategies of control – including contractual terms, conditions on coverage, and third parties – to impel policyholders to act more predictably.¹¹

The control insurers exert over social life has led some scholars to argue that the role the private insurance industry plays in the lives of individuals constitutes “governance” – a word typically used to describe the role of the state.¹² While governance by insurers involves many different facets, a key method by which insurers govern policyholders is through surveillance. Insurer operations are largely organized

9 Carol A. Heimer, *Reactive Risk and Rational Action: Managing Moral Hazard in Insurance Contracts* (University of California Press, 1985).

10 Ibid.

11 Ibid.

12 Richard Victor Ericson, Aaron Doyle, and Dean Barry, *Insurance as Governance* (University of Toronto Press, 2003); Richard Victor Ericson and Aaron Doyle, *Uncertain Business: Risk, Insurance and the Limits of Knowledge* (University of Toronto Press, 2004); Richard Ericson, Dean Barry, and Aaron Doyle, “The Moral Hazards of Neo-liberalism: Lessons from the Private Insurance Industry,” *Economy and Society* 29, no. 4 (2000): 532–558.

around collecting information about individuals from a distance (“dataveillance”) and collecting information through agent field judgments.¹³ Industry experts use collected information to distribute insurance benefits to some and deny benefits to others, through probability assessment to classify individuals as standard, substandard, and uninsurable risks.¹⁴ As insurers classify risks into increasingly narrow categories (risk “unpooling”), the insured population becomes increasingly segmented. Consequently, some parts of the insured population become de-selected for coverage, creating inequality among policyholders.¹⁵

Among the broader cultural impacts of insurer routines is that since insurance is a requirement for participation in many culturally-valued activities – such as driving a car or financing a house – efforts by insurers to segment risks can limit participation in these culturally-valued activities for some, while relatively facilitating the participation of others.¹⁶ Another effect of insurance routines, besides their potential to increase inequality among individuals in the social body, is the effect insurance has on defining the kinds of activities that are possible and desirable. Insurance creates incentives for individuals to avoid certain risk-taking behaviors, while encouraging them to embrace other kinds of risks. By defining what is insurable and what is not, insurers structure the

13 Ericson, Doyle, and Barry, *Insurance as Governance*.

14 Ericson, Barry, and Doyle, “The Moral Hazards of Neo-liberalism.”

15 Ibid.

16 Carol A. Heimer, “Insuring More, Ensuring Less: The Costs and Benefits of Private Regulation Through Insurance,” in *Embracing Risk: The Changing Culture of Insurance and Responsibility*, ed. by Tom Baker and Jonathan Simon (University of Chicago Press, 2002).

activities that can be pursued and which activities cannot.¹⁷ By defining who is insurable, insurers make statements about responsibility and morality.¹⁸ Scholars working in this tradition have focused on the loss reduction and loss frequency forecasting aspect of insurance – and the consequences that those activities have for individuals and organizations.

What has been missing from previous approaches to the study of insurance in sociology is a focus on indemnity. When a person, property, or event is already taken-for-granted as insurable, what are the processes by which insurable values of persons, properties, or events are assigned? Insurance does not insure a lived or suffered loss, which may have sentimental or non-economic value; instead, insurance can only provide “some certainty that capital will be there to repair whatever damage can be expressed in monetary terms.”¹⁹ The principle of indemnity, which means security against loss or damage, is the fundamental reason why buyers purchase insurance products. The condition of indemnity implies a match between what policyholders expect from their insurance and what insurers provide. How is indemnity produced, contested, or not produced through the subjective orientations of insurance consumers, which are grounded in the social meanings of insurance products, in interaction with insurer risk management routines? Essentially, the question of indemnity brings into a single research objective these two, seemingly disparate literatures: the role that the

17 Baker and Simon, *Embracing Risk*.

18 Brian J. Glenn, “Risk, Insurance, and the Changing Nature of Mutual Obligation,” *Law & Social Inquiry* 28, no. 1 (2003): 295–314.

19 Ericson and Doyle, *Uncertain Business*.

social meanings of insurance play in insurance markets and the social implications of insurer risk management practices.

The theory of false certainty advanced in this dissertation explains the failure of indemnity in the United States home insurance market. The home insurance market is characterized by a widespread belief among policyholders in the sufficiency of insurance coverage for home replacement after disaster – a social meaning grounded in policyholder interactions with agents, previous small loss experiences, and lay understandings of home insurance contracts – that only poorly reflects typical performance of home insurance after total loss, due to the historical inability of insurer valuation routines to ensure that most properties are fully insured-to-value. In short, frames of meaning of insurance, which are socially situated in the common experiences of policyholders, support social expectations of indemnity. While individuals may believe that they are transferring liability for restoring their home, as an object, to their insurer in the event of a covered loss, insurer risk management procedures ensure that insurers assume liability only for a set of dollars at risk – an amount which may or may not match the full cost to replace the whole home. From the insurer's standpoint, profitability depends directly on collection of adequate premium to cover claims payouts – and not directly on whether claims payouts indemnify homeowners in the event of total loss.

The bottom line is that the social meanings of insurance that predominate among consumers in a marketplace, and which may be a basis of insurance product legitimacy – indemnity – can depart substantially from the actual function of insurance – which is

the collection of premium for putting an amount of dollars at risk of payout in the event of a covered loss. In the market for home insurance, consumers tend to think they are buying a promise by their insurer to restore their home, but they, in fact, are buying something very different: a promise that their insurer will supply compensation toward loss that may not be sufficient to restore their home at all.

Future research in the sociology of insurance might focus on indemnity – in addition to focusing on how insurers govern through risk management routines and on how social meanings matter for making people, property, and events insurable. The very existence of insurance is premised on the notion that insurance functions to indemnify parties who have purchased it, and thus, insulates them from the risk of loss. How indemnity is socially and culturally constructed should be of interest to scholars of insurance institutions.

FINDING “FALSE CERTAINTY”

The home insurance market in the United States is afflicted by the problem of false certainty among home insurance consumers. To what extent can false certainty be found in other contexts?

I hypothesize that false certainty, as a defining feature of a market, requires certain market conditions. One seemingly important condition is that a view of the full function of the product is obscured for most consumers in the marketplace, either due to the rarity of the event in the market or inhibited flows of information about transaction outcomes. A second potentially important condition is that product outcomes are

generated through routines involving great unobserved complexity. A third condition could be that the product outcomes individuals seek are complex and individualized. A fourth condition might be that typical consumer experiences in the marketplace support beliefs that complex expectations of the product will be met.

Markets for some other forms of insurance, besides home insurance, would seem to meet these conditions – especially long term care insurance, travel insurance, and personal liability insurance. It is unlikely that many people personally have had experience drawing substantially upon the benefits of long term care insurance, travel insurance, and personal liability insurance for major needs. The underwriting and benefits of these policies are probably complex; insurers may arrive at an assessment of what their policyholders are legitimately owed based on a complex interpretation of policy benefits. The outcomes that individuals seek from these products are also complex: for long term care insurance, it is being able to comfortably remain living in one's own home despite failing health; for travel insurance, it is being reimbursed for all expenses incurred for a vacation that has been canceled and expenses for being evacuated, and even treated, for medical emergencies occurring on an insured trip; and for liability insurance, it is being fully protected from the financial consequences of personal liability judgments. Individuals participating in these insurance markets may have had personal interactions with insurance agents and third parties who, through those interactions, may have reinforced policyholder beliefs that their insurance policies would fulfill the functions they expect.

Markets for other kinds of insurance would seem to be less subject to false certainty.

In the medical insurance market, many policyholders have drawn upon their benefits for medical procedures and possibly found that their entitlements do not include being provided all desired (and prescribed) treatment. The limitations of medical insurance policies are well-publicized. Though, false certainty may exist among some segment of the market, such as college students who lack experience with protocols for ensuring that planned medical treatments will be covered. False certainty may also be rare in car insurance. Major automobile accidents are somewhat common, so most individuals probably have either direct or indirect experience with large loss automobile claims. These experiences may lead the majority of auto insurance policyholders to expect that what they will receive from their car insurance, in the event of loss, is an offer to repair the car and/or the car's depreciated value – which is typically market value. It is unclear whether false certainty would exist in the life insurance market. Inasmuch as life insurance benefit collection is subject to complex stipulations that oftentimes prevent beneficiaries from collecting the full face value of life insurance policies, false certainty could be present.

In many fields of insurance, insureds are assuming greater liability for their so-called insured losses as insurers increasingly restrict coverage provided by insurance contracts, increasingly de-pool insurance risks to leave many individuals without coverage in the private market and many others with unfavorable terms, and increasingly subject claims to intensive scrutiny.²⁰ To the extent that consumers in these insurance markets believe that their insurance products will meet a standard of

20 Ibid.

indemnity that is not, in fact, typically produced by insurance routines, these consumers can be said to have false certainty.

False certainty may also be found in markets outside the insurance context. Two other potential sites of false certainty include the market for equity-indexed annuities and the market for post-secondary education. Equity-indexed annuities are financial products that are marketed by insurers as offering the upside potential of stock market gains to consumers together with protection against the downside risk of market fluctuations. Essentially, these products are sold with the implied function that their owners will reap much of the benefits of the stock market in good years without taking on any of the downside risk of the stock market. Yet, these complex contracts can contain provisions of which consumers may not be aware that can eliminate or largely reduce the gains made through positive market performance.²¹

The market for post-secondary education may also be a context in which false certainty among market actors is present. The amount of student loan debt that students accrue to pursue post-secondary educational opportunities has become defined as a problem, since the job market advantages that post-secondary degrees afford is not always sufficient to cover the amount of debt individuals incur to attain those degrees in a timely fashion.²² A college degree or vocational training program is not a near-

21 Zeke Faux and Margaret Collins, "Indexed Annuities Cap Gains, Obscure Fees as Sellers Earn Trip to Disney," Bloomberg, January 19, 2011, <http://www.bloomberg.com/news/2011-01-20/indexed-annuities-obscure-fees-as-sellers-earn-trip-to-disney.html>.

22 "College Inc." Frontline, Public Broadcasting Station (PBS), May 10, 2011. This is not to say that there is not an income advantage overall to graduates, compared to non-graduates. It is only to say that students who have incurred debt to pursue particular post-secondary education opportunities may find that their returns from

guarantee of success, where success is defined as working within one's desired field for a living wage without being weighed down by crushing debt. But individuals in some demographic groups may mistakenly believe that a post-secondary degree is a ticket to the good life, without considering the costs involved in pursuing particular degree opportunities.

The concept of false certainty among market participants, and its institutional basis, may hold promise as a concept that can illuminate the dynamics of other markets. False certainty of product function, by definition, implies the absence of information and knowledge among market participants. It is a condition of information asymmetry, but not one in which low-information parties feel uncertain in their transactions. Individuals need not always have enough prior experience to know the categories of relevant information they may be lacking; their prior experiences and the inferences they make on the basis of those prior experiences may lead them to “knowledge” that is false. And the consequences of false knowledge can deeply affect individuals and families.

POLICY IMPLICATIONS

Insurers and insurance industry groups should be credited for having strived to resolve inadequate insurance-to-value in the market for dwelling and home insurance. The industry has attempted to resolve underinsurance through improving insurance sales practices, developing home insurance products with coverage minimums, automating

that investment insufficient to cover the amount of their debt. See also Patrice Hill, “College Grads Find Big Degree of Debt, Difficulty,” *The Washington Times*, July 5, 2012, <http://www.washingtontimes.com/news/2012/jul/5/college-grads-find-big-degree-of-debt-difficulty/>.

property valuation, and attempting – on a wide scale given the availability of guaranteed replacement provisions throughout the 1980s – to assume the risk that property valuations would prove to be inaccurate after total loss. Indeed, if history is any guide to the present, the industry is not to blame for its longstanding inability to value property accurately.²³

Despite their efforts to resolve underinsurance, insurers do not escape blame entirely. Individuals who lost their homes in the San Diego wildfires made comments during interviews which indicated that the personal interactions they had with their agents led them to infer that they had enough coverage. Their comments also revealed that they misunderstood the terms of their insurance contracts. For example, interviewed fire survivors reported that they had understood the “inflation guard” included with their policies to mean that their insurance would be routinely increased such that their coverage would keep pace with the amount necessary to rebuild their home if it were destroyed. Finally, policyholders encounter insurance advertisements that convey the notion that home insurance restores whole homes – rather than convey

23 Yet, it is important to note that consumer advocates have argued that underinsurance may, under current market conditions, be advantageous for insurers due to its potential to spread risk, limit catastrophe exposure, and enable insurers to remain competitive with one another. George Kehrer and Lila Hayes, *Disaster Recovery: A Survivor’s Guide to Insurance (Community Assisting Recovery Efforts (CARE))*, <http://carehelp.org/downloads/category/1-insurance-handouts.html?download=37%3Aa-survivor-s-guide-to-insurance>; Kenneth S. Klein, “When Enough Is Not Enough: Correcting Market Inefficiencies in the Purchase and Sale of Residential Property Insurance,” SSRN eLibrary, November 11, 2010, http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1707687. Unfortunately, since so much underwriting, property valuation, and claims data is protected by insurers as proprietary, a comprehensive data-driven analysis to test theories of whether underinsurance is advantageous for insurers – under current, rather than historical conditions – has not yet been conducted.

the reality that insurance provides compensation to homeowners for units of transferred risk, which could only amount to providing enough insurance compensation after disaster loss to put up half a home.

Through their routines and communications, insurers promote false certainty among homeowners in the function of home insurance in total losses. Insurers and insurance industry groups have recognized the magnitude of the underinsurance problem and tried to solve it for 70 years, but without success; however, just because insurers have repeatedly attempted to fix the problem does not mean that insurers are absolved of responsibility to make it clear to consumers that insurance does not function, in the vast majority of cases, in the way that consumers expect. Consumers deserve to be informed in their insurance policies, in commercials, and in their interactions with insurance agents – in no uncertain terms – that inadequate insurance to value has been a longstanding condition of the market for home insurance in the United States. Consumers should be informed that a major reason for the persistence of underinsurance is that insurers have been unable to calculate property values accurately for the majority of homes.

Consumer disclosures included at the point of insurance sale, like the California Residential Insurance Disclosure that was implemented in 2010,²⁴ are a step in the right direction; however, they fall short in communicating to policyholders that their underinsurance is not just possible, but is in fact probable. Consider the following four

24 The residential insurance disclosure is required by Section 10102 of the California Insurance Code. The particular text in use today was the result of a bill passed by the State Legislature in 2010.

excerpts from the California Residential Insurance Disclosure:

AVOID BEING UNDERINSURED: Insuring your home for less than its replacement cost may result in your having to pay thousands of dollars out of your own pocket to rebuild your home if it is completely destroyed. Contact your agent, broker, or insurance company immediately if you believe your policy limits may be inadequate.

THE RESIDENTIAL DWELLING LIMIT ... You are encouraged to obtain a current estimate of the cost to rebuild your home from your insurance agent, broker, or insurance company or an independent appraisal from a local contractor, architect, or real estate appraiser. If you do obtain an estimate of replacement value, and wish to change your policy limits, contact your insurance company. While not a guarantee, a current estimate can help protect you against being underinsured.

DEMAND SURGE: After a widespread disaster, the cost of construction can increase dramatically as a result of the unusually high demand for contractors, building supplies and construction labor. This effect is known as demand surge. Demand surge can increase the cost of rebuilding your home. Consider increasing your coverage limits or purchasing Extended Replacement Cost coverage to prepare for this possibility.

CHANGES TO PROPERTY: Changes to your property may increase its replacement cost. These changes may include the building of additions, customizing your kitchen or bathrooms, or otherwise remodeling your home. Failure to advise your insurance company of any significant changes to your property may result in your home being underinsured.

While the disclosure does communicate to consumers that it is possible that home insurance may not cover the costs to rebuild one's home after disaster and it does indicate that insurers disclaim responsibility for the sufficiency of coverage amounts, the disclosure as currently worded is unlikely to disrupt the false certainty of homeowners that coverage will probably be adequate in a total loss if they adhere to best practices like reporting property improvements, obtaining an extended replacement cost policy, and opting for code upgrade coverage. Policyholders who lost homes in the

2003 and 2007 San Diego wildfires and had adhered to these recommendations were still underinsured.

For a consumer disclosure to adequately inform policyholders of the function of the home insurance product, it should contain a statement, in plain English, that prepares policyholders for the likelihood – not simply a possibility – that they would be underinsured after disaster, even if they contact their agent about the details of their latest kitchen remodel, even if they buy an extended replacement cost policy, even if they express concerns about underinsurance to their agents, and even if they opt for available code upgrade coverage. These actions may reduce a homeowner's underinsurance, but it is problematic for insurers to withhold information from homeowners that reveals that, historically, insurers serving average risks have been unable to accurately assess the reconstruction costs of homes on a widespread basis. And indeed, this is the very reason that guaranteed replacement policies are no longer offered by most carriers.

Consumer education materials supplied by insurers need to be improved. While these materials suggest that underinsurance exists as a logical possibility, they do little to disrupt policyholder tendencies toward false certainty in the typical function of home insurance. For example, at the website for the Insurance Information Network of California, a page entitled “Underinsurance Q&A” suggests that underinsurance was not a problem after the 2003 California wildfires because, “96 percent of the destroyed homes [in Scripps Ranch] were being rebuilt larger than they were before the fire,

including 69 percent by more than 500 square feet.”²⁵ Further, the page insinuates that underinsurance was not a problem after the 2007 wildfires because there were no “widespread complaints” about underinsurance filed with the California Department of Insurance after the 2007 fires. The page also offers advice to homeowners about ensuring that limits are adequate:

How can a homeowner make sure the insurance policy adequately covers the home in the event of a total loss?

A. Homeowners should first fully understand the policy they plan to purchase. Knowing what it covers, what it doesn’t cover and what conditions define the coverage can help avoid problems after a disaster or major insurance claim. The main coverage, usually called “Dwelling” or “Coverage A,” should be equal to the cost of rebuilding should the home be destroyed. Insurers make an honest attempt to estimate the cost of reconstruction of the home based upon the information provided by the homeowner. However, it is still only an estimate. Many homeowner insurance policies now offer protection to help avoid underinsurance problems. Some policies provide general upgrades of the coverage limits of 25-to-50 percent. Others provide additional coverage specifically for building code upgrades.

The disclaimer that the reconstruction costs supplied by the insurer is “still only an estimate” is accompanied by the statement that “many homeowner insurance policies now offer protection to help avoid underinsurance problems.” Upon encountering this material, a reader might believe that, even though insurance companies in this modern litigious environment may feel compelled to enter a disclaimer, if a person knows “what it covers, what it doesn’t cover and what conditions define the coverage,” has an upgrade of the coverage limits of 25-to-50 percent, and/or has coverage specifically for building code upgrades, he or she can feel secure that coverage will be adequate for the

25 Insurance Information Network of California, “Underinsurance Q & A,” news release, November 13, 2009, <http://www.iinc.org/articles/317/1/Underinsurance-Q--A/Page1.html>.

majority of people. The disclaimer that the valuation is “only an estimate” does not convey that in the majority of cases, individuals are underinsured; consequently, it gives readers little reason to suspect that underinsurance is systemic.

A news release by the national Insurance Information Institute (III) provides another example of how informational materials generated by the insurance industry are unlikely to disrupt policyholder false certainty in typical home insurance function. The news release advises homeowners of two options a homeowner can take if he or she disagrees with the reconstruction estimate provided by his or her insurer: the first option is for the homeowner to ask for a “line-by-line review” of the policy from his or her insurer; the second option is to hire an appraiser or local contractor to come up with an estimate of reconstruction costs.²⁶ The news release discounts the value of estimates provided by either professional, explaining that an appraiser will typically provide market values and not necessarily a replacement value that includes building code upgrades while a local contractor who builds new homes does not have the same knowledge of scenarios that drive up costs as would a reconstruction contractor. Both statements are true; however, the outcome of the explanation is to reassure homeowners that the insurer's recommendation is superior – in comparison with other options for property valuation. Again the discussion fails to provides readers with any indication that most homeowners will have policy limits that are inadequate for rebuilding in a total loss.

26 Insurance Information Institute (III), “Determining Home Reconstruction Costs Is a Partnership of Insurer And Homeowner, Says the I.I.I.,” news release, February 16, 2012, http://www.iii.org/press_releases/determining-home-reconstruction-costs-is-a-partnership-of-insurer-and-homeowner-says-the-i.i.i..html.

Missing from disclosures, from consumer education materials, from insurance commercials, from interactions with insurance agents, and from the wording of insurance policies are simple statements that communicate to homeowners the historical outcomes of large loss claims and the pervasive history of underinsurance. Insurer and insurance industry group routines have contributed to “false certainty” in the typical function of insurance among homeowners. If homeowners are to be given more accurate information about the function of home insurance in total losses, they should be told point blank in both written and oral communications with agents:

The insurance industry has historically been incapable of providing homeowners with full insurance coverage that is sufficient for rebuilding. This means that you will probably not be okay in a total loss. Realize that if you lose your home to disaster, you will probably have to rely on savings, loans, discounts, or your own labor to make up your insurance gap if you wish to rebuild a home that was as nice as the one you had. The best you can do with your insurance now is to minimize your underinsurance to the extent possible by contacting your agent frequently to provide fine-grained details about your property and to report any property changes. But if history is any guide, you will probably still be underinsured.

If policyholders knew in advance that insurers have historically been unable to systematically insure properties to value, it would give policyholders an opportunity to prepare better for the possibility of disaster if they were so inclined.

Whether insurers and insurance industry groups will take further steps to correct misplaced expectations among homeowners regarding the likely outcome of large loss claims is an open question. Perhaps the communication of the true nature of the home insurance product may be more appealing to insurers if insurers – in addition to providing information about the persistence of underinsurance as the most common

situation for homeowners – were to provide consumers with a report of their particular large loss claims outcomes to distinguish themselves from competitors. Policyholders should be able to compare insurers according to how well insurance limits have matched the costs to rebuild destroyed homes after disaster. Perhaps by disclosing this measure of home insurance quality, home insurers may be able to compete not only on premium amount and perceived service quality in sales and partial losses, but also on how well the home insurance product functions in the situations it is needed most.

Previous sociologists of disaster have shown how organizational routines can contribute to the causes and consequences of extreme events. Organizational routines of insurers are not exempt from contributing to the production of disaster. Insurance routines magnify disaster for individuals and households inasmuch as they contribute to the tendency of consumers to believe in the sufficiency of their coverage. Prior to loss, insurance routines produce a sense of security among homeowners that insurance covers the costs of rebuilding, but after loss, when homeowners are reeling from having lost everything they own, their understandings of insurance are shown to be false.

As a financial intermediary that was intended to collect resources from individuals, safeguard those resources, and to distribute those resources to contributing individuals who need it, the insurance institution is made possible by the trust that policyholders have in it. The insurance institution has absorbed the mutual assistance among individuals and small groups that characterized disaster aid prior to the Industrial Revolution. The case of false certainty in home insurance function demonstrates that the degree of trust that individuals place in these financial intermediaries may be misplaced.

The product of home insurance that most people experience is a feeling, a “peace of mind,” that they are secure. Indeed, that may be the only benefit their home insurance will ever provide. But this feeling of security is currently based on misplaced expectations of the home insurance product. These misplaced expectations inhibit individuals from preparing – if only psychologically – for the effects that disasters may bring.

APPENDIX: FURTHER NOTES ON METHODS

I interviewed 46 homeowners who had sustained total home losses from the 2003 San Diego area wildfires. I also interviewed six consumer advocates; two insurance agents; four insurance adjusters; two California Department of Insurance staff; and five community recovery team administrators. In addition, I conducted interviews with a contractor who is also an expert witness; a local banker who issues construction loans; an emergency dispatcher who worked during the fires; and an executive officer of a major grant making organization active in disaster recovery.

I observed 61 community meetings for fire survivors, of which seven included lectures by “bad faith” attorneys on how consumers should manage claims. I also attended six formal one-on-one policy review sessions with consumer advocates and fire survivors who lost homes in 2007, and six meetings exclusively by and for individuals working in the disaster recovery community. On occasion, I would stop by the designated recovery centers, located in fire-affected communities, to observe informal activities and routines.

I analyzed technical reports distributed by various government agencies and nonprofits; brochures, pamphlets, and newsletters available to fire survivors; consumer

guides to claims and insurance; and, websites and archived websites that were visited by fire survivors. I also analyzed transcripts from hearings held by the Department of Insurance, the California State Legislature, and the Senate Insurance Committee; AICPCU claims handling manuals and textbooks; insurance policies; and, press releases and reports from industry. I drew upon articles that appeared in regional newspapers, like the San Diego Union-Tribune and the LA Times, and to a more limited extent on articles appearing in national newspapers.

By relying heavily on documents, including insurance industry training materials, corporate publications, and other communications, I follow in the footsteps of insurance scholars who have gone before me: documents have been an important source of data for researchers who study the insurance industry. These types of materials have been used by a number of social science researchers who have addressed questions in insurance.¹

SAMPLING OF INTERVIEW SUBJECTS

My attempt to obtain a diverse sample of fire-affected families from 2003 began with a public list of damaged properties that was available through the County of San Diego, Department of Planning and Land Use (DPLU). The list contains information about damaged and destroyed properties in the unincorporated areas of San Diego County,

1 Viviana A. Rotman Zelizer, *Morals and Markets: The Development of Life Insurance in the United States* (Transaction Publishers, 1979); Sarah Quinn, "The Transformation of Morals in Markets: Death, Benefits, and the Exchange of Life Insurance Policies¹," *American Journal of Sociology* 114, no. 3 (2008): 738–780; Carol A. Heimer, *Reactive Risk and Rational Action: Managing Moral Hazard in Insurance Contracts* (University of California Press, 1985).

including loss address, assessors parcel number, and whether the primary dwelling was damaged or destroyed. Initially, I thought locating fire survivors through the list would be relatively straightforward.

Obtaining interviews with randomly selected fire survivors from the County and city burn lists was challenging. First, the lists did not include mailing addresses, only loss addresses. While this is unproblematic overall in an urban setting, because people usually receive mail at their residence addresses, in a rural setting, people are more likely to receive mail at post office boxes. If the property is a vacation home, cabin or rental, the owner of the property may receive mail at a different residence address, perhaps even out of state. Since much of the fire damage was focused in rural areas, this presented a problem. Second, consulting the burn lists did not reveal whether the current owner of the property was, in fact, the owner at the time of the fire in 2003. After the fire, some people sold their properties and moved away. Third, the burn lists did not include names.

To obtain missing mailing addresses and property owner names, I approached community recovery workers who had been active during and after the October 2003 fires, to ask whether they could share the information they had collected in 2003 with me. I was told that the information could not be shared, due to confidentiality concerns. I attempted to get mailing addresses from FEMA, but was told by a FEMA employee that this information would likely not be made available in response to an informal request, but that if I wished, I could use the Freedom of Information Act (FOIA). After corresponding with a journalist who had used FOIA to obtain FEMA records on

payments to Florida hurricane victims, I concluded that obtaining the information through FEMA would require expensive legal counsel and a couple of years. I then tried to get contact information for 2003 fire-affected families from the American Red Cross, but just as with the community recovery team workers, I was informed that they could not disclose identifying information to me. I tried contacting the San Diego County assessor. The assessor's office told me that I would need to pay several hundred dollars to receive a spreadsheet with addresses of where the tax bills are mailed. I considered the option, but ultimately found a better solution: in a stroke of good fortune, a field informant connected me with a real estate agent whose friend worked at a title company. I pitched my project to the title company employee, who obtained permission from her supervisor to supply me with names, mailing addresses, and the most recent sale date of the damaged properties if I could bear a turnaround time of a few weeks for every 500 records requested. The title company was true to its promise. I submitted lists of assessor parcel numbers, and in due time I received my needed information in return.

The title company list was very helpful. It supplied names and mailing addresses of record for property owners. Yet, it was not sufficient to completely resolve the sampling problems I faced. The burn lists and the title company list did not match up exactly. County damage assessment teams had assembled the list of damaged properties in the field and under great time pressure. As a result, the assessor parcel numbers included in the County list were not always accurate.² This meant that some of the property

2 County damage assessment teams used GIS mapping and "windshield surveys" to confirm damage after the fire Walt Ekard and Harold W. Tuck, San Diego County After Action Report, Firestorms 2003 (Office of Emergency Services, County of San Diego, 2003).

information I requested from the title company, since the information was referenced by parcel number, did not always correspond to fire destroyed properties. My luck was somewhat better with the lists of destroyed properties in incorporated areas that I submitted to the title company. This was perhaps because City damage was easier to survey by City officials since the properties were not as far ranging and remote.

To create a sampling frame, I culled the County list to remove properties that had been reported on the burn list as having been damaged but not completely destroyed. I also culled the title company list to remove properties that were sold after October 2003, since the current owners of those properties were not the owners at the time of the fire. Because these lists had different formatting than one another, and because the County list had inconsistencies in formatting of street names within the list itself, a merge was not possible. So, I used a random number generator to generate a list of numbers. I first turned to the County list and selected the corresponding record, then I attempted to match that name and address with a title company record. If there was a match, I included it in the sample. If there was no match, I moved to the record below it, and so on, until reaching a match. After each instance of adding a property to the sample, I returned to my random number list and repeated the process.

I sent three installments of letters to fire-affected homeowners asking for participation. The first set was addressed to 55 property owners whose destroyed homes were located in the unincorporated areas of the County. The second set was addressed to 34 homeowners in the incorporated areas of the County: Scripps Ranch, Tierrasanta, and Poway. The third set was sent to 58 more homeowners whose damaged properties

were in the unincorporated areas. A total of 147 letters were sent to different households, which yielded 28 interviews. One contributing factor to the low response rate was that many of the letters were returned unopened because they failed to reach a valid mailing address. A second factor is that some of the people who responded said that they had suffered only a partial, and not a total loss – even though in some cases the County burn list indicated otherwise.

I attempted to follow up with individuals to whom I sent letters, by researching their names on various online phone directory sites for their phone numbers. Unfortunately, few additional interviews came out of my telephone follow-up effort. Numbers were not available, it was difficult to tell whether “John Doe” in El Cajon, CA was the same John Doe who had lost his home in Lakeside. When I suspected that I had found a number, I made calls and left messages that were not often returned. Through researching phone numbers and making calls, I was able to obtain 8 more interview respondents from the initial sample than the 28 I had initially procured.

In addition to the 33 households that were selected through a probability sample of disaster-affected families, I conducted 13 interviews with people who were known to my personal contacts or who I sought out directly through the Cedar Fire Rebuilding Recovery Group (CFRRG) – an organization that continues to gathers together Cedar fire survivors who are still in the process of rebuilding.

I obtained interviews with insurance personnel entirely through personal referrals. My attempts at cold calling agents and adjusters were not well-received. I remember one instance in which I contacted an insurance sales agent, who, out of desire to help

me with my project, gave me the direct line of the supervising adjuster in the home office. I was beside myself with joy at my good fortune. But when I called the adjuster, he was incensed and demanded to know where I got his number. Despite my best efforts to persuade him to participate in my study to convey my confidentiality policy, he bid me good day and hung up.

CONFIDENTIALITY

When discussing information provided through confidential interviews and nonpublic documents, to the best of my ability, I have withheld identifying information about persons and organizations. I use identifying details for persons and organizations only to the extent that those details are discussed in the context of publicly available information, not in the context of the stories and situations of my interview subjects or unwitting bystanders. As a consequence, my presentation of interview data cannot be as richly descriptive of individual homeowner situations, and of the practices of particular companies as it might otherwise be in the absence of such safeguards.

THE PARTICIPANT OBSERVER ROLE

In October 2003, my parents, brother, and I lost our home in the Cedar fire. It was devastating to me, personally, since I had always considered myself as being “away at school” at either UC Berkeley or Princeton. After the fire, I experienced a great sense of loss. Most of my personal possessions were destroyed in the fire. I saw my parents go through the insurance claim and rebuilding process. Like my interview subjects, I too

sat across the table with a dispassionate adjuster who waited patiently, if stoically, for one of us to stop crying as we rattled off the things we lost and would never see again. In this capacity, my identity as a Princeton researcher in my interviews with fire survivors was secondary. I was one of them, and our interviews evolved into conversations between members of the same club.

In another sense, I was a nonparticipant observer. As much as I would have enjoyed playing a greater role in coordinated community disaster recovery efforts, if I had taken this avenue I would have jeopardized a number of aspects of my project. First, I found that the disaster recovery organizations in San Diego were politicized. Small social service organizations were competing for limited donor and foundation dollars. Interpersonal conflicts existed among individuals who had long histories together from previous disasters. Aligning with any one organization would likely have inhibited my access to information held and generated within others. At least two organizations initially expressed the concern that I could be a “spy” for competing organizations. One individual expressed concern that I could use my position to “play both sides to my advantage.” I wanted to avoid giving any fuel, whatsoever, to these inaccurate perceptions, so I continually policed the boundaries of my involvement in order to carefully circumscribe my role.

The second reason why I attempted a relatively detached stance was because I felt that it was important to minimize my influence on recovery efforts and on insurance claims. Though doubtless my presence as a researcher had some influence – as is the consensus belief among most qualitative researchers – I have little reason to suspect that

my detached presence in the field altered the strategies of my informants in any patterned way. The institutions they were building and strategies they were employing to aid individuals in recovery had started long before I arrived on the scene; routines and practices were unfolding according to pressures, logics, and events external to me.

Access was difficult to negotiate at first. Some organizations in the field were more open to my presence than were others. A few were very cooperative from the very beginning; individuals working on behalf of them provided me with excellent and continued access to useful documents, meetings, and personal contacts. A few were initially very guarded in my presence and were initially unwilling to make time to speak with me, provide me with the opportunity to observe their programming in action. One community organizer suggested that an organization I was having the most difficult time getting cooperation from may be reticent because “they take money from insurance companies.”³ From their vantage point, “what I write might be critical of insurance companies, and they don’t want to necessarily be identified as having aided that criticism.” Indeed, it appears that some of the organizations active in San Diego’s disaster recovery efforts have accepted donations – directly or indirectly – from insurers and/or insurance industry organizations. It made sense, then, that perhaps they wanted to be sure that I would indeed exercise discretion in my use of information gained through observation of non-public activities and that I would honor my commitment to protecting the confidentiality promises I made to my informants. The first four months of fieldwork were challenging, not only due to a steep insurance and disaster recovery

3 Interview with a community organizer, May 2008.

learning curve, but because I was also heavily focused on managing my reputation.

Some disaster recovery activities eventually arose that I felt I could participate in. For example, I served food at an event for fire survivors, entered information collected by an organization into its own database, and suggested possible questions to an organization interested in surveying their constituents. Were I not to participate in these limited ways, it may have offended informants who had taken their very limited time to bring me up to speed and who let me observe their work. I did my best to ensure that my actions did not jeopardize the validity of my data nor my accepted status in the field.

After months of showing up to meetings and conducting interviews, I eventually became a fixture of the disaster recovery community. Six months into my fieldwork, I was accepted as a mostly silent observer, with a ready smile, who had proven to be discreet and politically neutral. Ten months into my fieldwork, informants who had given me a chilly reception upon my entry into the field opened up sensitive files for me to read and offered me office space to work (which I respectfully declined). Others shared contact information of fire survivors that they had amassed from public sources, emailed me useful articles and resources, and began to pressure me to hurry up and finish my research because they “can’t wait to read it” and, as one consumer advocate said, to “use it.”

What I took to be the greatest symbolic gesture of acceptance occurred months after my entry into the field. Every month, the San Diego Community Recovery Team would convene a large meeting of representatives of all the organizations active in the long term disaster recovery effort. During the meeting, the facilitator would call upon people,

one by one, who were sitting around the perimeter of the room to give an update about their activities. Organization representatives would share challenges and victories, put together informal committees to organize projects, and brainstorm about solutions to problems. When the facilitator reached my spot at the table, she would routinely pass over me. But at one meeting, in the last months of my fieldwork, the facilitator paused at my seat to ask: “Sara, do you have any updates to share?”

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