

Do-It-Yourself Security:

Safety, Gender, and the Home Fallout Shelter in Cold War America

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At the height of the cold war, from the 1950s to the early 1960s, the United States government embarked on a series of civil defence initiatives centred on the home fallout shelter. Calling on 'American' traits of enterprise and independence, shelter advocates sought an accessible and pleasurable way to help citizens prepare for nuclear war by transforming the home fallout shelter into an ideologically charged national do-it-yourself project. The government requested citizens to furnish their own security, and fallout shelters presented homeowners with a do-it-yourself activity that combined home improvement with family safety. Do-it-yourself provided both men and women with traditionally gender-appropriate tasks that strengthened domestic identity and offered a sense of contained purpose and control in increasingly uncertain times. Such expectations were carried into the construction of the home fallout shelter and perpetuated gender stereotypes in the post-nuclear world—literally building them into a concrete form. Despite public and private initiatives, however, fallout shelters permeated America's post-war consciousness more than its physical landscape; few Americans actually built shelters. Nevertheless, do-it-yourself helped promote the idea of security, while revealing larger cold war insecurities of daily life.

Keywords: cold war—do-it-yourself—domesticity—domestic space—fallout shelter—gender

At the height of the cold war, from the 1950s to the early 1960s, the United States government embarked on a series of civil defence initiatives centred on the home fallout shelter. Combining sophisticated technology with domesticity, the home fallout shelter encouraged Americans to define 'home' in terms of safety, nationalism, consumption and the nuclear family. Both government propaganda and popular magazines advocated programmes for protecting the nation against nuclear attack, and civil defence became a component of the post-war phenomenon of do-it-yourself.

This case study examines the home fallout shelter as an ideologically charged national do-it-yourself project that permeated America's post-war consciousness more than its physical landscape; few Americans actually built shelters. Nevertheless, the government requested citizens, through a series of publications reinforced by the mass media, to furnish their own security, and fallout shelters presented homeowners

with a do-it-yourself activity that combined home improvement with family safety. The fallout shelter is an instance of a largely imagined design phenomenon that can only be understood within the contexts of the broader political and social realities of cold war politics, and therefore, will be examined not only as an artefact, but also as an idea. The desire to protect the imperilled home, long a bulwark of American frontierism and self-defence, now translated to staving off the physical and psychological devastation of nuclear attack.

As part of the home, in basements or buried in backyards, the fallout shelter was a highly gendered realm, with men and women assigned separate roles. For centuries, women had been creating do-it-yourself projects, from home dressmaking to interior decoration, but during the post-war years, do-it-yourself became increasingly focused on tasks such as construction and carpentry, which were categorized as tasks for men. While do-it-yourself

projects provided a curative and creative outlet from the workaday world for both sexes, they allowed men to demonstrate competence and strength—major markers of masculinity throughout the twentieth century.¹

In safeguarding the nuclear family from nuclear attack, men assumed the role of capable protectors and providers. They did so at a time when masculinity was in considerable flux, and an emphasis on domesticity as well as certain masculine behaviours appropriate to corporate conformity replaced the wartime emphasis on the super-masculine military man. For women, do-it-yourself security relied on informed consumption and gender-normative domestic duties. According to civil defence literature, preparedness resided in a well-stocked larder and ‘emergency housekeeping’, responsibilities essential to women’s role as homemaker. Even though this emphasis took place at a time when women were returning to the workplace at greater rates than at any other time since the Second World War, they remained housekeepers and childcare providers first. Such expectations were carried into the construction of the home fallout shelter and helped perpetuate gendered stereotypes into the post-nuclear world—literally building them into a concrete form.²

In a world increasingly perceived as uncertain, the do-it-yourself home fallout shelter signified the solidity of domestic ‘American values’ and safety. Just as the government advocated political containment to minimize the destructive power of the Soviet Union and the atomic threat, historian Elaine Tyler May has suggested that ‘domestic containment’ was ‘now the key to survival in the nuclear age’. The do-it-yourself shelter placed the suburban home and family on the front lines of national defence. It promoted the idea of security, while revealing larger cold war insecurities of daily life. The do-it-yourself fallout shelter was the indispensable space that people hoped never to use.³

Laying the Foundation: United States Shelter Policy

In an attempt to counteract the alleged Soviet threat of world domination through nuclear annihilation, the federal government under the leadership of President Harry S. Truman established the Federal

Civil Defense Administration (FCDA) in 1951. Drawing on the success of the British use of bomb shelters in or near individual houses during the Second World War, the government embarked on a series of civil defence initiatives based on the idea of the private bomb shelter. The shelter not only promised protection and the comforts of home, but also marked its owners as patriotic. It drew on the image of the American frontier, and especially of the log cabin, as a bastion against attack. ‘Every home a fortress!’ declared Civil Defense director Leo A. Hoegh in 1958. ‘That can well be our watchword as we strive to attain the freedom won so dearly by our pioneer forbears’.⁴

According to the prodigious government and popular literature, shelters ensured not only the survival of one’s own family, but also that of the American people. Dr Edward Teller, labelled the father of the hydrogen bomb, believed that without adequate civil defence ‘the United States would cease to exist’.⁵ Moreover, shelters were part of a wider strategy to ensure the continuation of American dominance in a post-nuclear world. ‘If we have to start over again with another Adam and Eve’, asserted Georgia Senator Richard Russell, ‘then I want them to be Americans and not Russians, and I want them on this continent and not in Europe’.⁶

Lack of congressional funding thwarted national shelter initiatives, however, and interest turned instead to the more economical alternatives of mass evacuation and the elementary school initiatives of ‘duck and cover’.⁷ The development after the Second World War of the hydrogen bomb, and the increased awareness of the deleterious effects of radioactive fallout, however, forced a reappraisal of these strategies. Hiding under school desks or running from the blast would no longer protect Americans from the deadly toxic cloud, which, after the initial explosion, could travel for miles. *Facts About Fallout* (1955), a Civil Defense Administration booklet, noted that ‘normal’ amounts of radioactivity were not dangerous, but too much radiation could be lethal. ‘If you are exposed to it long enough’, it explained, ‘IT WILL HURT YOU! IT MAY EVEN KILL YOU’.⁸ Nuclear fallout necessitated protective spaces and Civil Defense Director Frederick ‘Val’ Peterson recommended a far-reaching national fallout shelter programme. Dissent, the extreme cost of the programme—estimates ranged from \$20 to \$40 billion—and suspicion of

state 'interference' in daily life, derailed congressional approval, and as a result, the government encouraged independent action.⁹ In 1958 President Dwight D. Eisenhower issued a National Shelter Policy advocating citizens' responsibility for their own protection and emphasized the merits of private shelter construction for homeowners.

The Eisenhower administration promoted this 'do-it-yourself' shelter policy through visual and printed media, including films and exhibitions such as the 1952 'Alert America' campaign, whose ten trailers travelled across the country filled with civil defence dioramas and films. Popular magazines also promoted civil defence, and in November 1958, *Good Housekeeping* published a full-page editorial, 'A Frightening Message For a Thanksgiving Issue', explaining how once the atomic bomb exploded, 'your only hope of salvation is a place to go'.¹⁰ It encouraged Americans to build family fallout shelters, and urged its readers to contact the government for free shelter plans 'that you can make yourself'. That there were fifty thousand requests is not surprising since the perceived threat of Soviet aggression increased in the late 1950s.¹¹ The Soviet development of Intercontinental Ballistic Missiles (ICBMs) and the 1957 launch of the space satellite Sputnik, putting the USSR ahead of the USA in the 'space race', fomented fears. The crisis over Berlin brought these fears to a climax when, on July 25, 1961, President John F. Kennedy addressed the country on national television warning citizens of the potentially imminent dangers of nuclear attack. More forcefully than any president before him, Kennedy advocated shelter construction, stating, 'To recognize the possibilities of nuclear war in the missile age without our citizens knowing what they should do and where they should go would be a failure of responsibility'.¹² He situated a national shelter programme as a central component of the nation's security and a powerful deterrent to the Communist threat. 'We shall neither be Red nor dead', he declared, 'but alive and free'.¹³ Over the next several months, Kennedy proposed a comprehensive civil defence policy, including a National Shelter Program that he hoped would, within five years, be capable of protecting the nation in the event of a nuclear attack. The high cost of the programme and continued doubts over the value of shelters, however, forced Kennedy, like Eisenhower before him, to encourage citizens to take defence into their own hands.

'Everybody's talking about shelters', *Life* asserted in January 1962.¹⁴ In the aftermath of Kennedy's address, fears intensified and interest in shelters skyrocketed. The Office of Civil and Defense Mobilization (OCDM) distributed twenty-two million copies of *The Family Fallout Shelter* (1959).¹⁵ The booklet, with an image on the cover of a man laying concrete blocks for his basement shelter, explained the potential dangers of nuclear fallout [1]. It indicated potential fallout areas and explained how the radioactive dust from a mushroom cloud could travel hundreds of miles from the site of the explosion; within twenty-four hours, fallout could blanket the United States. It encouraged do-it-yourself initiative and presented the home shelter as the best protection against fallout, providing detailed shelter plans and illustrations that included step-by-step instructions to guide the shelter builder through the construction process. [2, 3]. The OCDM also promoted *The Family Fallout Shelter* through advertising campaigns combining do-it-yourself as well as family 'togetherness'. Advocating shelters as 'your one defence against fallout', one poster depicted a young, casually dressed couple

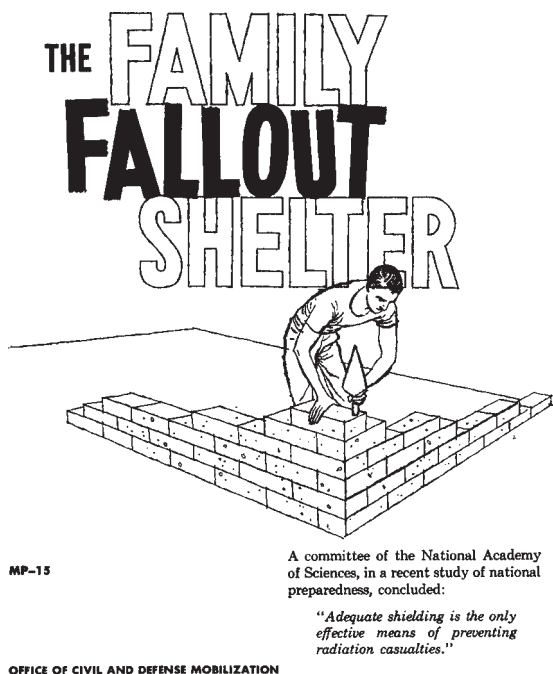


Fig 1. Government publications encouraged homeowners to build fallout shelters through do-it-yourself initiative. Reprinted from the Office of Civil and Defense Mobilization, *The Family Fallout Shelter* (GPO, Washington, D.C., 1959)

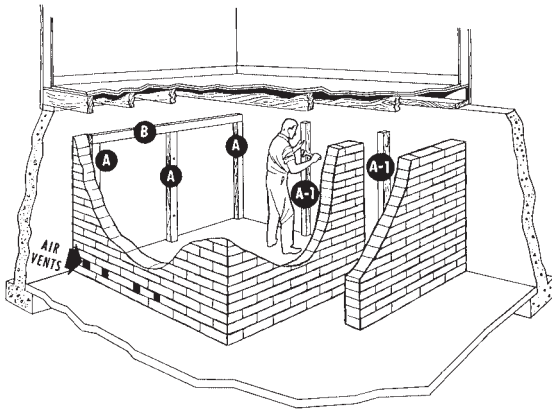


Fig 2. Detailed illustrations guided the do-it-yourselfer through the shelter construction process. Reprinted from the Office of Civil and Defense Mobilization, *The Family Fallout Shelter* (GPO, Washington D.C., 1959), p. 8

building their shelter together.¹⁶ A woman, wearing shorts and a sleeveless top, reads from the government booklet, while a man, dressed in a tee shirt and holding a spirit-level, lays concrete blocks [4].

The Rise of Do-it-Yourself: The Pleasure of Leisure

The rise of post-war leisure and of do-it-yourself built on the increased popularity of hobbies in the nineteenth century.¹⁷ Leisure activities rose in the years between the two World Wars (1918–1939), when recreation began to signify a fundamental element of the ‘good life’. Hobbies such as do-it-yourself gained in popularity during the Great Depression, when, with unemployment rates reaching nearly 25 percent, many Americans faced idle hours and reduced incomes and made do with things they could fashion at home. It was the Second World War, however, that helped transform do-it-yourself into a national pursuit. Magazines promoted do-it-yourself as ‘necessary but fun’, as home-front shortages of skilled workers forced men and women to learn how to repair and to decorate their own homes.¹⁸

During the 1950s, millions of Americans partook in more leisure activities than ever before. The major media extolled the business of leisure as an economic force, reaching new monetary heights in the post-war period. According to the 1959 *Life* article, ‘A \$40 Billion Bill Just for Fun’, by the late 1950s, Americans were spending more money on leisure

than on new housing and automobiles combined.¹⁹ Do-it-yourself, identified by the United States Department of Commerce as including painting, decorating, gardening and carpentry, was a major part of that leisure.²⁰ Projects ranged from furniture making to boat building, and in 1953, 11 million do-it-yourselfers—mainly men—sawed through 500 million square feet of plywood, brushed on 100 million gallons of paint, applied 150 million rolls of wallpaper, and laid enough asphalt roof tiles to cover the entire state of Oregon.²¹ By the mid-1950s, do-it-yourself was the largest of all American hobbies and the third most popular form of recreation for married men—surpassed only by reading and watching television.²² In August 1954, *Time* highlighted the public enthusiasm for do-it-yourself and suburban living when it featured on its cover an eight-armed man astride his lawnmower, happily engaged in several do-it-yourself projects at once [5].²³

In the post-war period, new and more easily managed tools and materials encouraged amateurs to tackle home improvement tasks. Classes, how-to books, and in-store demonstrations instructed novice do-it-yourselfers on the basics of home repair.²⁴ In addition, do-it-yourself, like other hobbies, offered a means of self-expression and a path to personal fulfillment. ‘Be your own carpenter...and you’ll find it easier to be yourself’, promised a Shopsmith tool advertisement.²⁵ As Margaret Mulac asserted in *Hobbies: The Creative Use of Leisure* (1959), Americans could follow paths to happiness through productive leisure. Linking ‘success’ with individual determination in life as well as individual do-it-yourself projects, she declared, ‘How satisfying your life can be is strictly up to you. This is the original Do-It-Yourself project. If you want a good life, you have to make it yourself.’²⁶

Do-it-Yourself Security and the ‘Good Life’

During the post-war period, the American dream of the ‘good life’ of home ownership, abundant goods, and quality leisure time was shadowed by the spectre of Soviet aggression. This potential threat struck at the ideological heart of America: the family home. As Elaine Tyler May writes, during the cold war the family and, by extension, the home they occupied, offered a ‘psychological fortress’ against the uncertainties and

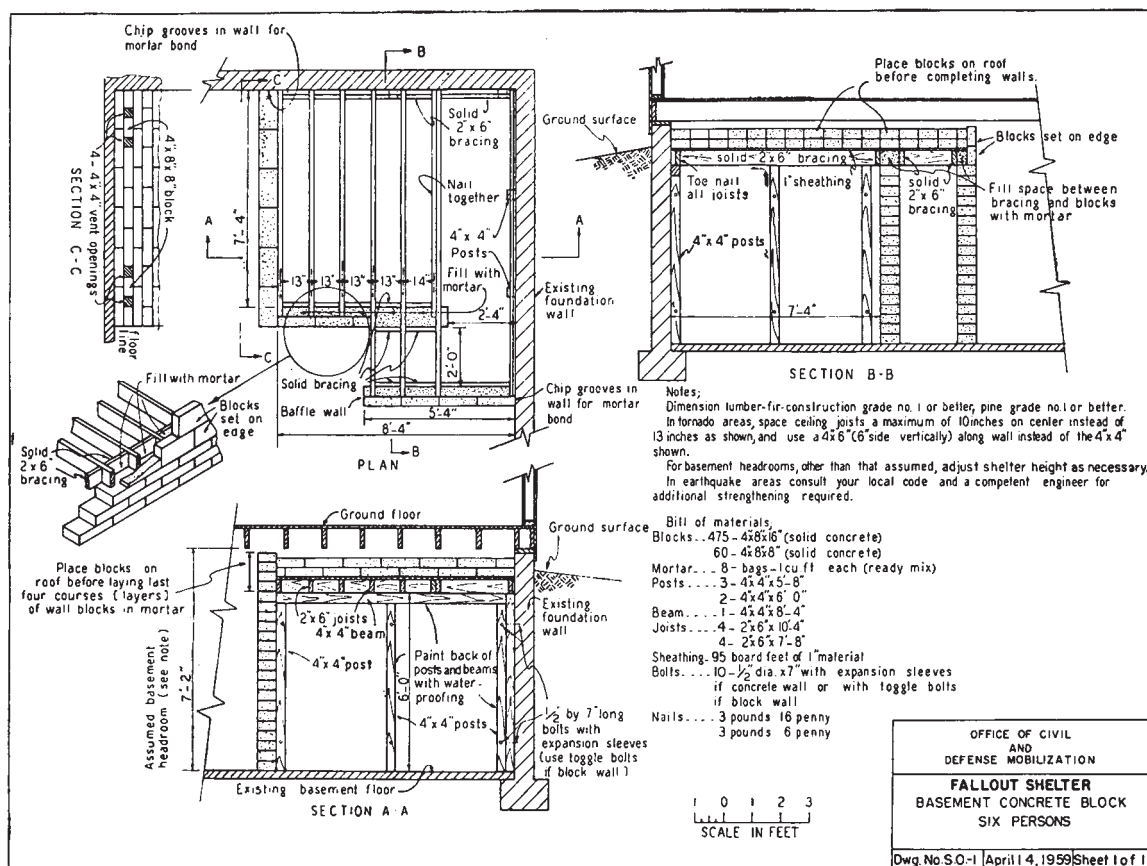


Fig 3. Itemized plans included dimensions and lists of necessary items. Office of Civil and Defense Mobilization, *The Family Fallout Shelter* (GPO, Washington D.C., 1959), p. 21

anxieties of the age.²⁷ Through what were regarded as 'American' traits of initiative and independence, shelter advocates sought an accessible and pleasurable way to help Americans prepare for nuclear war. They linked security with do-it-yourself home improvement, and thereby hoped to transform the psychological fortress into a real one.

The rise in do-it-yourself and the 'good life' was tied to an increase in home ownership and suburbanization. When developer William Levitt declared, 'no man who owns his own house and lot can be a Communist. He has too much to do', he acknowledged the longstanding ideological and political power of the idea of the private, suburban home in the nation's consciousness, an idea that came to fruition during the post-war period.²⁸ In 1947, Levitt opened the suburbs to the middle class and offered a solution to the post-war housing shortage. He revolutionized the housing

market by rationalizing the production process of thousands of four-room, seven-hundred-square-foot Cape Cod style houses that were situated on sixty-by-one hundred foot lots located in Levittown, Long Island. By buying homes in Levittown, some Americans could now participate in the 'American Dream' that positioned the single-family home with a yard at its centre.²⁹ The unfinished attics of Levitt's houses encouraged home improvement activities, but cartoonist Morris Brickman lampooned the lengths to which some do-it-yourselfers went when making their housing choices. 'It's TOO perfect', a house shopping couple declares, '... nothing left for us to do ourselves' [6].³⁰ By constructing, repairing, or redecorating a part of their own home, new American homeowners, like mythologized frontiersmen, could become even more personally invested in defending their homestead and homeland.



Fig 4. Office of Civil and Defense Mobilization poster, 1958

In addition to protection, the discourse surrounding do-it-yourself shelters also drew on notions of craft, moral character, and virtues of thrift that can be traced back to the Arts and Crafts movement. Magazines such as *Better Homes and Gardens* extolled the money-saving virtues of rolling up one's sleeves by proclaiming 'home shops ... pay their way,' not only 'in actual money saved on home repair and improvement', but also 'in satisfaction'.³¹ Do-it-yourself shelters also offered an ambitious building project in keeping with those routinely presented throughout the 1950s in hobby and lifestyle magazines, ranging from laying a patio to installing a swimming pool.³² For 'do-it-yourself buffs', *Time* explained, 'there are few projects too difficult to try'.³³ In 1951, for example, *Better Homes and Gardens* published a story about a young couple constructing a house in the Minneapolis suburbs, entitled, 'Inexperienced as We Were, We Built our Home.' The same year, *Popular Mechanics*, a monthly hobby magazine with a hands-on approach, ran a four-part series that followed the exploits of freelance journalist Tom Riley and his wife Vanita. The series, written by Tom, was entitled, 'How I Built the *Popular Mechanics* Ranch House.' The cover beckoned to do-it-yourselfers, declaring, 'Want a House? Then Build it Yourself as I Did!' That Tom had little carpentry experience was just the point—if he could do it anyone could.³⁴

Magazines also advocated building smaller structures such as garden houses, summer homes, and cabins as do-it-yourself projects. In 1961, *Popular Mechanics* featured a six-hundred-square-foot 'Cabin in a Kit' with materials included and ready to be 'assembled by a do-it-yourselfer with or without professional help'.³⁵ Plans for these smaller structures indicated that building them, like a shelter, was possible for the average home carpenter. Popular authors confirmed the ease and accessibility of building small shelters. In the *Fallout Shelter Handbook* (1962), Chuck West advised that the first requirement for shelter construction was 'a sharp pencil and a lot of paper'.³⁶ After that, common sense ('check all materials for nails and termite damage') and a little elbow grease could do the trick.³⁷ As a result, the do-it-yourself fallout shelter was presented to the American public as an accessible and enjoyable way for homeowners to protect themselves by preparing for the future. In reality, like most home improvement projects, the skills required surpassed those of the average do-it-yourself enthusiast.³⁸

Life Underground: The Home Shelter

Home fallout shelters came in several varieties. They ranged from lean-tos, basic basement concrete boxes, and metal pipes lowered into garden holes, to much

more elaborate shelters such as those belonging to the wealthy and to celebrities, showcased in the popular press. Alfred Gwynne Vanderbilt, Groucho Marx, Dinah Shore, and Pat Boone, whom a New York gossip columnist considered to be among the 'most fallout-proof citizens in Southern California', all installed elaborate retreats.³⁹ *Time* reported on a Jacksonville millionaire who equipped his shelter with a supply of wine and a pool table, while *Popular Mechanics* featured the bomb-proof 'House for the Atomic Age' built by a Hollywood contractor and equipped with an 'underground sanctuary', reached via a swimming pool. The magazine also featured a deluxe shelter in Los Angeles designed by industrial designer Paul Lazlo. The shelter offered complete living quarters for eight, full kitchen and bath, spiral staircase, elevator, electric generator, ventilating system, water and oxygen tanks, and welding torches.⁴⁰

While elaborate shelters promised the comforts and amenities of home until after the two-week 'all clear' signal sounded, most do-it-yourself shelters had few



It's TOO perfect . . . nothing left for us to do ourselves.

Fig 6. From Morris Brickman (1955), *Do-it-yourself*



Fig 5. 'Do-it-Yourself: The New Billion-Dollar Hobby' *Time* ©1954

amenities and offered an uncomfortable and unappealing version of post-nuclear life. On average, typical do-it-yourself shelters were small. The common basement concrete shelter featured by the OCDM, for example, offered four feet of head clearance and, although presented as capable of housing up to six persons, it measured only sixty square feet. The walls were constructed of rough, unpainted concrete blocks, and for ventilation, shelter dwellers had to rely on either small gaps left in the shelter walls or hand-operated air blowers. Bunk beds were commonly used to save space and lanterns or flashlights provided the only illumination. Shelters also had no running water, so tight-lidded containers sprinkled with chlorine sufficed as latrines. People who spent time in test shelters, ranging from a few days to several weeks, complained of excessive heat, boredom and foul smells. A rendering of a do-it-yourself fallout shelter published by *Time* in 1959 provides an idea of the more austere qualities typical of shelter life [7].⁴¹

Nonetheless, in an effort to make the idea of building shelters attractive, shelter advocates also promoted the do-it-yourself fallout shelter as an additional space that could enhance the value of the home and the

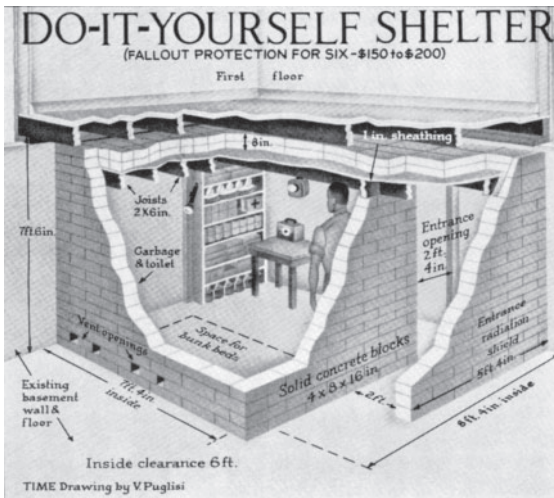


Fig 7. While the popular press highlighted the elaborate shelters of the rich, the fallout shelter of the average family was far more austere. *Time*, 20 July 1959, p. 19. Illustration by V. Puglisi. Collection of the New York Public Library

quality of life within it, even if nuclear war never came. The shelter, it was suggested, could be used as a workshop, a darkroom, a wine cellar, a guestroom, or even a child's play room.⁴²

'If You're Not All Thumbs': Building the Home Shelter

To facilitate the construction of do-it-yourself shelters, government literature, popular magazines, and educational films provided detailed plans and step-by-step instructions. *Walt Builds a Family Fallout Shelter: A How-To-Do-It Project* (1961), for example, a film co-sponsored by the National Concrete Masonry Association (NCMA) and the OCDM, followed Walt, an amiable, bespectacled older man, through the process of building his home shelter.⁴³

Using the popular civil defence booklet *The Family Fallout Shelter* as his guide, Walt builds the 'Basement Concrete Block Shelter'. The affordable model, estimated to cost approximately \$150, required materials readily available in any hardware store and included: 535 solid concrete blocks, five bags of ready mix mortar, six wooden posts, 95 feet of board sheathing, and six pounds of nails. To build the shelter, Walt first draws a chalk guideline on the basement floor. He then lays a row of concrete blocks in wet mortar, affixes the wooden beams to the basement walls and,

after waiting at least one day until the mortar in the block wall dries, installs a double layer of concrete blocks across the ceiling. Finally, he mortars the last row of blocks into position. As he explains, the shelter takes him only a few evenings and weekends to complete. 'Anybody', he notes, 'who isn't all thumbs can do it'. Walt's reassuring message and his avuncular demeanour encouraged the average do-it-yourselfer to roll up his sleeves and start building.

For those not inclined to watch a movie or write away for booklets, mass-circulation magazines also provided do-it-yourself information. In September 1961, *Life* ran the lead story 'Fallout Shelters: A New Urgency, Big Things to Do—and What You Must Learn'. The article optimistically promised that 97 per cent of the population could survive a nuclear attack if only they knew what to do when the bomb hit. *Life* endorsed the national call for shelters and superimposed an image of an exploding mushroom cloud over a letter written by President Kennedy. Kennedy encouraged readers to participate in a voluntary shelter programme for the good of themselves and America, by calling on civilian patriotism and self-reliance: 'Nuclear weapons and the possibility of nuclear war are facts of life ... [but] there is much that you can do to protect yourself—and in doing so strengthen your nation ... The ability to survive coupled with the will to do so therefore are essential to our country'.⁴⁴

Life laid out a series of do-it-yourself plans ranging from the simple to the complex, complete with renderings of constructed shelters, detailed blueprints, and supply lists. It featured: the 'Simple Room in Basement Built with Concrete Blocks', the 'Big Pipe in the Backyard Under Three Feet of Earth', 'A Double-walled Bunker for Safety Above Ground', which 'could be built by any enterprising do-it-yourself family', and 'A \$700 Prefabricated Job to Put up in Four Hours [8]'.⁴⁵ In keeping with the money saving message of do-it-yourself, the magazine estimated the shelters would cost one-third of those supplied and constructed by professional contractors.

Three months later *Popular Mechanics* published 'You Can Build a Low-Cost Shelter Quickly', which outlined plans for four shelters. Like *Life*, the article contained illustrations and detailed shelter plans. The most basic and least expensive shelter consisted of little more than a 4 x 6 foot wooden frame covered with sandbags. The 'Under-the Patio', the 'Store-Away', and the 'Basic Sit-Down' shelters provided

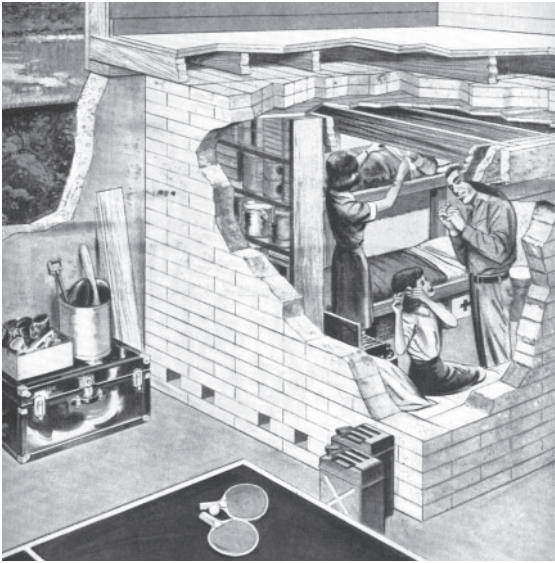


Fig 8. 'Simple Room in Basement Built with Concrete Blocks.' *Life*, 15 September 1961, p. 98. Illustration by Elmer Wexler. Collection of the New York Public Library

more space, and conceivably more protection, but necessitated more advanced do-it-yourself skills such as working with concrete.⁴⁶

Security in a Box: The Home Fallout Shelter Kit

Owing to the often complex and daunting shelter construction process, some companies eased the burden on the builder by manufacturing shelter kits. Just as the cake mix provided post-war housewives an error-free confection—all dry ingredients were pre-measured—so too did the shelter kit relieve men of the responsibility of carpentry expertise, not to mention endless trips to the hardware store for forgotten items.⁴⁷

The idea of do-it-yourself assembly using ready-made components was well known since the Berlin work canvasses of the mid-nineteenth century. Kits of the post war period offered an array of choices and encompassed everything from audio sets to paint by numbers. Hobby kits had grown into an economic force, expanding from a \$44 million industry in 1945 to a \$300 million one by 1953. In 1961, *Life* featured the assembly of the low cost Kelsey-Hayes shelter (the company was a major supplier to the automobile industry) as an additional civil defence option. Assembled from a kit of four modular steel panels,

the 2 × 66 × 8 foot shelter, available at Sears that autumn, could reportedly be erected by two men in four hours with only a screwdriver and a wrench. *Life*'s picture series of Art Carlson and his adolescent son Claude effortlessly snapping the shelter together clearly expressed that building a shelter was not only easy but also fostered father and son relationships [9].⁴⁸

Bonding and the Bomb: Fathers and Sons Build Shelters

The image of a father and son building a do-it-yourself shelter domesticated nuclear war. It endorsed the notion that all was well by making shelter construction part of everyday life, and helped normalize war preparations by representing a father and son engaged in everyday tasks such as cleaning the car or mending the garden fence. It was an appropriately gendered activity and provided boys with 'wholesome outlets' for their creative and youthful energies. Fathers engaging in do-it-yourself were deemed to set 'a fine example' for boys, especially at a time when society considered teenagers at high risk of juvenile delinquency and homosexuality.⁴⁹ Fathers were expected to provide positive role models for their sons, and failing to do so could have dire consequences. Images of fathers and sons working together abound in shelter literature, reinforcing these ideals [10].⁵⁰

Building a shelter together could also provide quality time where the father could impart to his son ideas of



Fig 9. Art and Claude Carlson raise the roof on the family shelter. Shelter kits eased the burden of building a shelter from scratch. *Life*, 15 September 1961, p. 105. Photograph by Dimitri Kessel/Getty Images

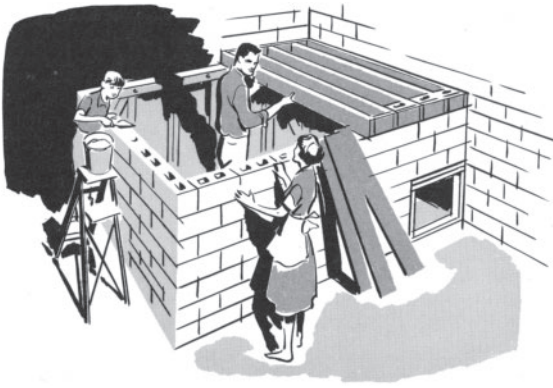


Fig 10. Shelter literature frequently characterized shelter construction as an appropriately masculine activity that fathers and sons could do together. Department of Defense, Office of Civil Defense, *Fallout Protection: What to Know and Do About Nuclear Attack* (GPO, Washington D.C., 1961), p. 20

patriarchal and family duty and responsibility. The family followed defined gender roles to ensure that life in the shelter was ‘Snug, Equipped, and Well Organized’.⁵¹ *Life* depicted the finished Kelsey-Hayes shelter filled with supplies and occupied by the entire Carlson family. Mrs Carlson tended the larder and water supply, while daughter Charlene minded the linens and daughter Judy worked as the ‘shelter librarian’. Mr Carlson, on the other hand, managed the emergency equipment and tools, while his son looked after the flashlights, transistor radio, and battery supply. Grim-faced but resilient, and holding a shovel rather than a pitchfork, Mr Carlson and his family present an atomic update to Grant Wood’s *American Gothic* (1930) [11].

Family Fallout: Femininity, Masculinity, and The Gendered Nature of Do-it-Yourself Preparedness

Like many other gender stereotypes depicted in mass culture, images of home repair in magazines and advertisements in the 1950s often reduced gender to stereotypical roles: men work with tools and build things while women open boxes and decorate.⁵² As the Carlson family demonstrates, the same can be said for home fallout shelters. Although both men and women participated in do-it-yourself projects, the responsibility of constructing the home shelter, at least according to the promoters, fell squarely on the



Fig 11. ‘Family in the Shelter, Snug, Equipped and Well Organized.’ *Life*, September 15, 1961, p. 105. Photograph by Dimitri Kessel/Getty Images



Fig 12. Ben Smith, local Civil Defense Director for Salt Lake City, cements the shelter wall with his son while his daughter paints an outdoor scene. *Time*, 20 October 1961, p. 23. Photograph by George Bettridge. Collection of the New York Public Library

man of the house. Depictions of male shelter builders dominated civil defence brochures and popular magazines. Men are almost invariably shown building the shelter or, once inside, actively operating equipment such as the air ventilator. Women, on the other hand, are depicted engaged in domestic tasks such as tending children, stocking the pantry, or decorating. An image of Ben Smith and his children, published in the 1961 *Time* article ‘Civil Defense: The Sheltered Life’, depicts the typical division of labour promoted by shelter literature: Mr Smith and his son cement the shelter wall while his daughter decorates it by painting a ‘picture window’ [12].⁵³

The highly domesticated vision of mid-century women, however, occurred during a time when the number of women in the workplace matched war-time highs, and by 1960 women were one-third of the nation's workforce. Despite greater numbers of middle- and working-class women active in the labour force, and marking a significant shift in 'women's work', many women still found themselves confronted by societal pressure that urged 'traditional' domestic roles and circumscribed career opportunities. Women were expected to be the primary—if not the sole—homemakers, housekeepers, and child-care providers. Not surprisingly, these gendered roles were repeated in fallout shelter literature. The extreme nature of the emergency, however, validated these roles and acknowledged the crucial significance of this type of unpaid domestic labour.⁵⁴

Women provided safety and security though informed consumption and domestic tasks. From furniture to foodstuffs, shelter life demanded specialized goods. Castro Convertibles produced a space-saving 'Jet Bed', a foldaway metal bunk designed specifically for shelter use, and General Foods appealed to 'families believing in preparedness' with a protein-rich product called 'Multi-Purpose Food'.⁵⁵ This was consumption in the name of civil defence; cooking equipment, medical supplies, a battery-powered radio, flashlight, a can opener, sanitary napkins, (which could also double as bandages), toothache pills, deodorant, books, games for the kids, and tranquillizers were just some of the items recommended for shelter life. Women were responsible for making sure these and other items were purchased and ready.

The well-stocked larder became a central metaphor for shelter preparedness. In his *Fallout Shelter Handbook* (1962), Chuck West provided tips for a successful shelter that included careful checking of items on a grocery list [13]. No campaign exemplified women's role in shelter preparedness more than 'Grandma's Pantry'. Headed by the Federal Civil Defense Administration's Director of Women's Activities, Jean Wood Fuller, with the help of the National Grocers' Association and the National Dietetic Association, the campaign linked American 'heritage' to cold war policy and sought to appeal to women's role as nurturer by evoking nostalgic images of the past. Its promotional material included a drawing of a 'traditional' American kitchen with curtained windows, a cast iron stove, a circular hook rug, a large



Fig 13. 'A careful listing and rechecking of your shelter provisions will help eliminate those forgotten items,' Chuck West (1962), *Fallout Shelter Handbook*, p. 93

box of firewood, and shelves stocked with foodstuff. A caption read, 'Grandma's Pantry Was Ready—Is Your "Pantry" Ready in Event of Emergency?'.⁵⁶

Civil defence increasingly 'militarized' the family home, and historian Laura McEnaney has argued that women assumed the role of 'atomic housewife'. In keeping with more 'traditional' gender roles, much shelter literature conflated cleaning up after nuclear attack with gender-normative 'feminine' duties such as everyday housework. Good housekeeping after the blast was also purportedly one of the best protections against fire (loose items could ignite from the heat), as well as fallout. In *How to Survive an Atomic Bomb* (1950), Richard Gerstell, using the language of domesticity, argued that unopened food was safe to eat after an attack, but could become 'dirty' if it came into contact with radioactive 'dust'. Careful homemakers only need 'wash the outside' of packages for safety. The warning signs were clear: good housekeeping inside the shelter could mean the difference between life and death.⁵⁷

While women protected the family home through domestic duties, men did so through construction, and the gendered nature of shelter building demanded that they fit into mid-twentieth century ideas of acceptable 'masculine' behaviour. According to historian Steven M. Gelber, 'by the 1950s being handy had, like sobriety and fidelity, become an expected quality in the good husband'.⁵⁸

Do-it-yourself furnished men with a paraphernalia of masculinity that forged their domestic identities.

Working with tools demonstrated masculine ideals of power and competence, ideals reinforced by a 1957 *Better Homes and Gardens* article featuring male film stars. The article pictured Rory Calhoun, Glenn Ford and George Montgomery, among others, mixing cement and working with table saws [14]. According to the author, these men, whose success in 'Western' movies lent them an added aura of strength and competent masculinity, reputedly found 'complete relaxation and enjoyment working with...tools'.⁵⁹ Skill in the workshop signified maleness; 'The hammer, saw, and quarter-inch electric drill', Gelber argues, 'became the emblems of the new masculinity, and men who refused to master them did so at some risk to their standing in the eyes of spouse and community'.⁶⁰

For many men, do-it-yourself also helped them grapple with the post-war 'crisis of masculinity' in which they wrestled with shifting gender roles, expectations, and the very meaning of maleness itself. In *The Organization Man* (1956), William H. Whyte lamented the loss of male identity and individualism in

the wake of corporate conformity.⁶¹ Indeed, Jack Arnold's novel and subsequent film, *The Incredible Shrinking Man* (1956), summed up the anxieties of many mid-century men who saw their masculinity disappearing before their very eyes.⁶² The older ideal of the 'Heroic Artisan', virile, independent, and in control of his own labour, was vanishing. 'If we want to have men again', Arthur Schlesinger Jr wrote, '...we must first have a society which encourages each of its members to have a distinct identity'.⁶³ As men sought out other means to express their masculine identity, do-it-yourself, including fallout shelters, became an arena in which they could demonstrate their manhood. Through shelter construction, men reaffirmed their masculine identity by building protection not only for themselves, but also for the 'weaker sex'⁶⁴ and for children.

Do-it-Yourself Dissent: The Dismantling of the Fallout Shelter Ideal

The debate over the merits of home fallout shelters raged throughout the Truman, the Eisenhower, and the Kennedy administrations. Despite considerable government propaganda, business investment, and the availability of detailed blueprints, fewer than 3 per cent of Americans built fallout shelters. A 1960 Gallup poll revealed that only 21 per cent of Americans had ever given any thought to building a home shelter, and the following year, when asked if they had made any changes to protect their home against nuclear attack, 95 per cent responded negatively.⁶⁵ The results of a 1962 civil defence study conducted in the New York City area reinforced these findings:

While the overwhelming majority feel that their country would be in danger in a case of war, relatively few people feel that there is something which they themselves can do to protect themselves [*sic*]. Shelters are specifically rejected as a useful policy by about twice as many people as accept them; it is plain that the people...did not consider construction of either family or community shelters as a useful means of self-protection.⁶⁶

The reasons why Americans chose not to build shelters are a complex combination of economic, social, and political factors. Perhaps for some it was the high cost of shelter construction. For others, it



Fig 14. *Better Homes and Gardens* described the actor Rory Calhoun as a 'typical handyman'. The magazine reported that Calhoun had remodeled a section of his own home and was in the process of rebuilding a small boat. *Better Homes and Gardens*, November 1957, p. 79

was lack of faith in their effectiveness. A 1961 letter to the editor of the *New York Times* condemned the ‘insanity of bomb shelters’, while other dissenters criticized the realities of shelter life, asking, ‘With the prospect of living like an animal, who would want to survive?’⁶⁷ Virtually useless as shields, shelters shared more in common with tombs than sanctuaries. Even the most skilled do-it-yourselfers could be forgiven for being doubtful about the efficacy of elaborate shelters against the threat of nuclear fallout. While presented as a straightforward project, the do-it-yourself shelter necessitated above-average carpentry skills. After rating shelters according to cost, reliability and predicted performance, the Consumers Union found none acceptable. Similarly, out of the thirty home shelters inspected by one civil defence official, twenty-seven failed to meet the woefully inadequate official requirements of basic fallout protection.⁶⁸

By the early 1960s people grew increasingly sceptical of the ‘myth of survival’. The arguments of many, including the Committee for a Sane Nuclear Policy (SANE), politicians, academics, unions, magazines, newspapers, and clergy alike highlighted the problems and contradictions inherent in America’s fallout shelter policy. Rabbi William F. Rosenblum warned against ‘the kind of thinking that will make moles and mice of men instead of human beings created in the image of God’.⁶⁹ In November 1961, *Newsweek* asked, ‘Survival: Are Shelters the Answer?’ The article argued that they were not, and questioned the morality of the high cost of shelter construction which favoured the survival of only the wealthy. It also questioned the overly optimistic claims of shelter supporters and found them misleading: ‘The facts of nuclear war, fallout, and shelter life’, it declared, were ‘far more complex and sobering’, than previously admitted.⁷⁰

Many women played an active role in dissent. In 1961, a group of women from Berkeley, California urged citizens to mail *Fallout Protection: What to Know and Do About Nuclear Attack* back to the White House with a note asking for a ‘more positive approach to world problems’.⁷¹ Women in New York City also subverted the maternal image promoted in civil defence literature when they organized vocal protests against Operation Alert, a mandatory mock civil defence drill. The women, accompanied by their children, braved arrest and explained to reporters that ‘All this drill does is frighten children and birds. I will not raise my children to go underground’.⁷²

Increasingly, as Americans eschewed the ‘mole’ mentality, they considered peace as the only acceptable antidote to nuclear war. Margaret Mead’s 1961 *New York Times Magazine* article, which shared the same title with the *Newsweek* shelter story, also asked, ‘Are Shelters the Answer?’ and reported the change in public opinion. ‘Peace’, Mead declared, ‘no longer is an unobtainable ideal...but a necessary condition of continued human existence’.⁷³ One could say that the government ‘design’ (in terms of propaganda) collapsed in the face of a population that remained unconvinced as to the effectiveness of the solution.

Conclusion

The home fallout shelter exemplified the struggle to reconcile the home as a site of safety with the home as a site in peril. In the short story ‘The Brigadier and the Golf Widow’ (1964), John Cheever evokes the encroaching dread suggested by the fallout shelter, and the extent to which the idea of it permeated cold-war American culture:

Mrs. Pastern had bought the plaster-of-Paris ducks, the birdbath, and the gnomes in an attempt to give the lump in her garden a look of innocence; to make it acceptable—at least to herself. For, bulking as it did in so pretty and domestic a scene and signifying as it must the death of at least half the world’s population, she had found it, with its grassy cover, impossible to reconcile with the blue sky and the white clouds.⁷⁴

Building the family shelter drew on the gendered stereotypes associated with the ideal of post-war family life. ‘Traditional’ gender roles offered stability and safety in an era of change, an era shadowed by the threat of nuclear attack. The ideals of do-it-yourself supplied both men and women with appropriate male and female tasks that strengthened domestic identity and gave them a sense of contained purpose and control in an increasingly uncertain world. The home fallout shelter, though intended to reassure, however, was a site of anxiety. Shelters, even if built, could only provide symbolic security. The home fallout shelter was a paradoxical space that domesticated war by militarizing the family home. As such, it was doomed to fail in reality, even if it was to survive as an icon in post-war America.⁷⁵

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Notes

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- 1 Pat Kirkham and Janet Thumim, 'You Tarzan,' in *You Tarzan: Masculinity, Movies and Men*, Pat Kirkham and Janet Thumim, (eds.) Lawrence and Wishart, London, 1993, pp. 11–26.
- 2 'The New American Domestic Male,' *Life*, 4 January 1954, pp. 42–5; James Gilbert, 'A Feeling of Crisis: The 1950s,' in *Men in the Middle: Searching for Masculinity in the 1950s* (University of Chicago Press, Chicago and London, 2005), pp. 62–80; US Department of Defense, Office of Civil Defense, *Fallout Protection: What to Know and Do About Nuclear Attack* (GPO, Washington D.C. 1961), p. 29; William H. Chafe and Harvard Sitkoff (eds.) *A History of Our Time: Readings on Postwar America*, 4th edn. (Oxford University Press, New York and Oxford, 1995), p. 224; Stephanie Coontz, *The Way We Never Were: American Families and the Nostalgia Trap* (Basic Books, New York, 1992), p. 161.
- 3 Elaine Tyler May, *Homeward Bound: American Families in the Cold War Era* (Basic Books, New York, 1988), p. 14 and p. 103. Several noteworthy civil defence studies devote chapters to the fallout shelter. See Margot A. Henriksen, *Dr. Strangelove's America: Society and Culture in the Atomic Age* (The University of California Press, Berkeley and Los Angeles, 1997); Laura McEnaney, *Civil Defense Begins at Home: Militarization Meets Everyday Life in the Fifties* (Princeton University Press, Princeton and Oxford, 2000); Guy Oakes, *The Imaginary War: Civil Defense and American Cold War Culture* (Oxford University Press, New York and Oxford, 1994); Kenneth D. Rose, *One Nation Underground: The Fallout Shelter in American Culture* (New York University Press, New York and London, 2001); Tom Vanderbilt, *Survival City: Adventures Among the Ruins of Atomic America* (Princeton Architectural Press, New York, 2002), and Allan M. Winkler, *Life Under a Cloud: American Anxiety About the Atom* (Oxford University Press, New York and Oxford, 1993). For investigations into the early years of civil defence, see Paul Boyer, *By the Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age* (Pantheon Books, New York, 1985).
- 4 Address of Leo A. Hoegh, January 21, 1958, quoted in Oakes, *The Imaginary War*, p. 131.
- 5 Dean Breilis, *Run, Dig, or Stay? A Search for an Answer to the Shelter Question* (Beacon Press, Boston, 1962), p. 60.
- 6 *New York Times*, 22 January 1971, quoted in Winkler, *Life Under a Cloud*, p. 129. According to one report prepared for the Office of Civil Defence, proper civil defence, including shelters, ensured that 'Americans would survive to sustain the existence of the nation.' Worcester Polytechnic Institute, Department of Civil Engineering, *Shelter Design and Analysis, by the Architectural and Engineering Development Center, Department of Civil Engineering, The Worcester Polytechnic Institute, Worcester, Massachusetts* (GPO, Washington D.C., 1968), p. xvii.
- 7 The atomic scientific community endorsed mass evacuation as a viable civil defence option. In 1951, the *Bulletin of Atomic Scientists* devoted an entire issue to 'Defense Through Decentralization.' In 1956, after heavy lobbying from the automobile industry, President Eisenhower passed *The Interstate Highway Act*. It provided 41,000 miles of roads that, in the event of a nuclear attack, could serve as evacuation routes. See Federal Civil Defense Administration, *Your Car and Civil Defense: 4 Wheels to Survival* (GPO, Washington D.C., 1955); Kenneth T. Jackson, 'The Interstate Highway', in *Crabgrass Frontier: The Suburbanization of the United States* (Oxford University Press, Oxford and New York, 1985) pp. 248–51; and Winkler, *Life Under a Cloud*, pp. 117–120. For a history of the development of civil defence policy in the post-war period, see Rose, 'A New Day Dawning,' in *One Nation Underground*, pp. 14–37, and Winkler, 'Civil Defense,' in *Life Under a Cloud*, pp. 109–35. The civil defence 'Duck and Cover' campaign, directed at school children, relied on the amiable and animated Bert the Turtle to convey its message. Bert, who also appeared in comic book form, starred in 1951 in an animated children's educational film written and directed by Anthony Rizzo and produced by Archer production. Depicting Bert retreating into his shell after an explosion, the film explained how 'BERT DUCKS AND COVERS' during an air raid to protect himself from potentially hazardous flying debris.
- 8 Federal Civil Defense Administration, *Facts About Fallout*, (GPO, Washington D.C., 1955), p. 2. Fallout refers to the invisible radioactive particles of soil and other matter that, after forming a mushroom cloud, fall back to earth. For information about fallout and tips for protection, also see US Department of Defense, Office of Civil Defense, *Fallout Protection*.
- 9 Winkler, *Life Under a Cloud*, p. 119.
- 10 'A Frightening Message for a Thanksgiving Issue', *Good Housekeeping*, November 1958, p. 61; Winkler, *Life Under a Cloud*, p. 121.
- 11 Ibid.
- 12 Kennedy's civil defence speech is quoted in 'Civil Defense: The Sheltered Life,' *Time*, 20 October 1961, p. 21; Walter Karp, 'When Bunkers Last in Backyards Bloom'd,' *American Heritage* (February/March 1980) p. 85, Winkler, *Life Under a Cloud*, p. 126, and Henriksen, *Dr. Strangelove's America*, 200.
- 13 'Civil Defense: The Sheltered Life,' *Time*, 20 October 1961 p. 25.
- 14 'Everybody's Talking About Shelters,' *Life*, 12 January 1962, p. 35. In October, *Time* declared how, 'At cocktail parties and P.T.A. meetings and family dinners, on buses and commuter trains and around office water coolers, talk turns to shelters.' 'Civil Defense: The Sheltered Life,' p. 21, also quoted in Henriksen, *Dr. Strangelove's America*, p. 209. The following month, *Newsweek's* cover depicted an image of a giant mushroom cloud looming over a family ensconced in their basement shelter. 'Survival: Are Shelters the Answer?' *Newsweek*, 6 November, 1961.
- 15 Karp, 'When Bunkers Last,' p. 86, also reported in Henriksen, *Dr. Strangelove's America*, p. 203; Office of Civil and Defense Mobilization, *The Family Fallout Shelter* (GPO, Washington, D.C., 1959).
- 16 For more do-it-yourself shelters, see US Department of Defense, Office of Civil Defense, *Family Shelter Designs* (GPO, Washington DC, 1962). This booklet contains eight shelter designs complete with illustrated pictures and detailed plans. During the 1950s, 'togetherness', especially in relation to do-it-yourself tasks, reflected gendered roles. As Penny Sparke notes, while do-it-yourself 'might have meant sharing, it also served to refine and enhance, rather than to diminish, the sexual division of labour within the home itself. Penny Sparke, *As Long as it's Pink: The Sexual Politics of Taste* (London: Pandora, 1995), p. 171.
- 17 Between 1850 and 1950, time spent working outside the home fell from sixty-six to forty hours per week, allowing

- more time for leisure pursuits. Moreover, society began to idealize hand labour and embraced leisure as a moral, healthful, and rejuvenating antidote to the often alienating nature of divided and repetitive work (by hand as well as machine), and a moral alternative to unwholesome pastimes. Donna R. Branden, *Leisure and Entertainment in America* (Henry Ford Museum, Dearborn, MI, 1988), p. 9, and T. J. Jackson Lears, 'Origins of the American Craft Revival: Persons and Perceptions,' in *No Place of Grace: Antimodernism and the Transformation of American Culture 1880–1920* (Pantheon Books, New York, 1981), pp. 66–96; Steven Gelber cites Garrett Winslow, 'Practical Decoration for the Home Interior,' *Suburban Life*, October 1912, p. 187, as the first instance of the term 'Do-It-Yourself.' Steven M. Gelber, 'Do-it-Yourself: Constructing, Repairing and Maintaining Domestic Masculinity,' *American Quarterly* 49 (1997) p. 79, also see Gelber, *Hobbies: Leisure and the Culture of Work in America* (Columbia University Press, New York, 1999). For a comprehensive history of do-it-yourself, see Carolyn M. Goldstein, *Do-it-Yourself: Home Improvement in 20th-Century America* (New York: Princeton Architectural Press, 1998).
- 18 Unemployment increased from 3.3 per cent in 1929 to a high of 24.9 per cent in 1933. Unemployment remained at over 15 per cent throughout the 1930s. US Department of Labor, Bureau of Labor Statistics, 'Compensation from Before World War I Through the Great Depression,' <www.bls.gov/opub/cwc/>, (November 2005); 'Be Your Own Handyman,' *American Home*, January, 1943, p. 36, and Alfred Friendly, "'Almost Good Enough" Won't Be Good Enough for Him,' *House Beautiful*, January 1945, p. 38. Magazines such as *Good Housekeeping*, *Better Homes and Gardens*, *The Family Handyman*, *Popular Mechanics*, *McCall's*, *Sunset*, and *American Home* all featured do-it-yourself home improvement projects. See Robinson Murray, 'You Can Become a Handy Handyman,' *Better Homes and Gardens*, October 1951, pp. 249–50. On the nature of leisure in America, see Kathryn Grover (ed.) *Hard at Play: Leisure in America, 1840–1940* (University of Massachusetts Press, Amherst, 1992). For a comprehensive history of do-it-yourself, see Carolyn M. Goldstein, *Do-It-Yourself: Home Improvement in 20th-Century America* (Princeton Architectural Press, New York, 1998).
- 19 Robert Coughlan, 'A \$40 Billion Bill Just for Fun,' *Life*, 28 December 1959, p. 70.
- 20 US Department of Commerce, 'The Do-It-Yourself Market,' in *Mass Leisure*, Eric Larrabee and Rolf Meyersohn (eds.) (The Free Press, Glencoe, Ill, 1958), p. 274.
- 21 'The Shoulder Trade,' *Time*, 2 August 1954, p. 62. Also see, 'Do-it-Yourself is Big Business,' *New York Times*, 10 June 1956, 'The New Do-It-Yourself Market,' *Business Week*, 14 June 1952.
- 22 Statistic quoted in Gelber, *Hobbies*, p. 278.
- 23 According to *Life*, leisure and hobbies not only aided the national economy but also led to a better world. 'Leisure Could Mean A Better Civilization,' *Life*, 28 December 1959, pp. 62–3.
- 24 Easier-to-use materials also helped the do-it-yourself complete tasks. Materials such as plywood came in smaller panels making for convenient handling, and rollers and latex based paints also eased do-it-yourself jobs. See Cynthia Kellogg, "Do-it-Yourself Painters on Rise As New Products Lighten Task," *New York Times*, 12 May 1953.
- 25 'Be Your Own Carpenter,' *Better Homes and Gardens*, October 1951, 193.
- 26 Margaret E. Mulac, *Hobbies: The Creative Use of Leisure* (Harper and Brothers, New York, 1959), p. 4. Do-it-yourself offered weary Americans 'a soul satisfying process,' and curative solutions for their health concerns. *Time* reported on the palliative effects of do-it-yourself, featuring the experiences of a business executive who credited the pastime with saving him from a suicide attempt, and a jewelry store owner who is 'healthier than he has been in years' after he 'cured himself of a nervous breakdown' by building his own home. 'The Shoulder Trade,' pp. 63–4.
- 27 May, *Homeward Bound*, 11.
- 28 Eric Larrabee, 'The Six Thousand Houses That Levitt Built,' *Harper's*, September 1948.
- 29 For a history of Levittown, see Herbert J. Gans, *The Levittowners: Ways of Life and Politics in a New Suburban Community* (Pantheon Books, New York, 1967); Barbara M. Kelly, *Expanding the American Dream: Building and Rebuilding Levittown* (State University of New York Press, Albany, 1993); Gwendolyn Wright, *Building the Dream: A Social History of Housing in America* (Pantheon Books, New York, 1981), pp. 251–54, and Clifford Edward Clark, Jr., *The American Family Home, 1800–1960* (University of North Carolina Press, Chapel Hill, N.C., 1986), pp. 221–225. For a history of the American suburbs, see Jackson, *Crabgrass Frontier*.
- 30 Morris Brickman, *Do-It-Yourself: Or My Neighbor is An Idiot* (Gilbert Press, New York, 1955), np. For an investigation into the humorous side of do-it-yourself, see Goldstein, "Spoofing the Amateur" in *Do-It-Yourself*, pp. 41–4.
- 31 E. R. Haan, 'You'll Save With A Home Shop,' *Better Homes and Gardens*, November 1951, p. 68.
- 32 Ethel McCall Head, 'Build Your Terrace for Half the Money,' *Better Homes and Gardens*, October 1951, pp. 318–20.
- 33 'The Shoulder Trade,' 62.
- 34 Dorothy McGinnis, 'Inexperienced as We Were, We Built our Home,' *Better Homes and Gardens*, September 1951; Tom Riley, 'How I Built the *Popular Mechanics* Ranch House,' *Popular Mechanics*, May 1951. For exploits in home shops, see Darrell Huff, 'We've Found a Substitute for Income,' *Harper's*, October 1953, pp. 26–33.
- 35 'Cabin in a Kit,' *Popular Mechanics*, August 1961, p. 87. The idea of building one's own home was a common theme throughout the do-it-yourself boom. *Life* ran a story on Robert Berger, a high school maths teacher who, with plans furnished by Frank Lloyd Wright, was building his own home in Marin County, California. 'Here's a Nail, Do it Yourself,' *Life*, 28 December 1959, p. 92.
- 36 Chuck West, *Fallout Shelter Handbook* (Fawcett Publications, Greenwich, CT, 1962), p. 50.
- 37 *Ibid.*, p. 51.
- 38 Do-it-yourself could be hazardous. A 1952 report by US insurance companies listed 623,000 home accidents, many caused by hand and small power tools. Raymond F. Yates, *New Methods for Home Repair and Improvement* (Longman and Green, New York, 1955), p. 2.
- 39 'Survival,' *Newsweek*, 6 November 1961, p. 19, also mentioned in Rose, *One Nation Underground*, p. 189.
- 40 'Civil Defense: The Sheltered Life,' p. 22; 'House for the Atomic Age,' *Popular Mechanics*, August 1953, pp. 108–11; 'Atomic Hideouts,' *Popular Mechanics*, March 1958, pp. 146–8. Also see, '\$938,000 Bomb Shelter Goes With Presidency,'

- New York Times*, 12 March 1952, and 'Subterranean Atomic Suburbia,' featuring more atomic designs by Paul Lazlo. *Interiors*, February 1953, pp. 70–71.
- 41 'Family of 4 Seals a Shelter For Test,' *New York Times*, 16 June 1955; 'Family Lives 3 Days In Bomb Shelter Routine,' *New York Times*, 18 April 1955; American Institute for Research in the Behavioral Sciences, *Psychological and Social Adjustment in a Simulated Shelter*, sponsored and reprinted by the Office of Civil and Defense Mobilization (Washington D.C., 1961), p. 4 and p. 58; 'Do-it-Yourself Shelter,' *Time*, 20 July 1959, p. 19. Shelter advocates also presented do-it-yourself shelters as an antidote to the notoriously crooked 'suede shoe' trade. As calls for shelters increased, John Gregory Stocke points out that many unscrupulous manufacturers sought to cash in on this potentially lucrative market. See, John Gregory Stocke, '“Suicide on the Installment Plan”: Cold-War Era Civil Defense and Consumerism in the United States,' in *The Writing on the Cloud: American Culture Confronts the Atomic Bomb*, Alison M. Scott and Christopher D. Geist (eds.) (University Press of America, Lanham, MD., 1997), pp. 44–60, 'Building Shelter Skelter,' *Time*, 1 September 1961, p. 50, 'Suede Shoe Gyps Pose Growing Threat to Legitimate Fallout Shelter Market,' *House and Home*, December 1961, pp. 45–6, 'Fallout Shelters: Bonanza for Builders?' *House and Home*, November 1961, pp. 47–8. The Department of Defense warned consumers against misleading advertising claims that could lure unwary customers to 'inadequate' products. For purchasers of store-bought shelters, the message was 'buyer beware.' US Department of Defense, Office of Civil Defense, *Fallout Protection*, p. 22.
- 42 'Atom Bomb Shelter Offered for Home,' *New York Times*, 19 August 1950; 'Wonderful to Play In,' *Time*, 5 February 1951, p. 12; 'A Spare Room Fallout Shelter,' *Life*, 25 January, 1960; US Department of Defense, Office of Civil Defense, *Personal and Family Survival: Civil Defense Adult Education Course Student Manual* (GPO, Washington DC, 1961), p. 90.
- 43 NCMA, *Walt Builds a Family Fallout Shelter: A Do-It-Yourself Project*, RG 311, Video. 096, National Archives, also mentioned in Stoke, p. 49.
- 44 John F. Kennedy, 'A Message to You From the President,' *Life*, 15 September 1961, p. 95.
- 45 *Ibid.*, pp. 92–3, and pp. 100–104. Also discussed in Henriksen, *Dr. Strangelove's America*, pp. 207–8.
- 46 'You Can Build a Low-Cost Shelter Quickly,' *Popular Mechanics*, December 1961, pp. 85–9. In addition to shelter construction, *Popular Mechanics* also provided instructions for other do-it-yourself shelter projects. See, 'Outdoor Antenna for Fallout Shelter,' *Popular Mechanics*, February 1962, p. 204. Handling concrete numbered among the most important tasks for building a home fallout shelter. As author Chuck West advised in the *Fallout Shelter Handbook*, 'No matter what type of shelter you build, working with concrete will be a major part of the construction.' West, *Fallout Shelter Handbook*, pp. 50–51. Laying concrete was a topic often covered in hobby magazines. See 'How to Lay Concrete Blocks,' *Popular Mechanics*, August 1958, pp. 164–7, W. B. Eagan, 'Eight Types of Mortar Joints and How to Make Them,' *Popular Mechanics*, July 1958, pp. 176–9, 'Cement Jobs Are Easy,' *New York Times*, 10 June 1956.
- 47 For more information on cake mixes and their significance in the 1950s, see Karal Ann Marling, 'Betty Crocker's Picture Cook Book,' in *As Seen on TV: The Visual Culture of Everyday Life in the 1950s* (Harvard University Press, Cambridge and London, 1994), pp. 202–40.
- 48 Gelber, *Hobbies*, pp. 166–7. Berlinwork is a form of cross-stitch embroidery done on canvas with a pre-traced image and colour guide. It was popular in the early to mid-nineteenth century and was predominantly used for accessories, furnishings, firescreens and decorative pictures; Gelber, *Hobbies*, p. 265. For an investigation into post-war hobbies, see Marling, 'Hyphenated Culture: Painting by Numbers in the New Age of Leisure,' in *As Seen On TV*, pp. 50–85. For the popularity of hobby kits, see Gelber, 'Kits: Assembly and Craft,' in *Hobbies*, pp. 255–67. For a survey of ready made shelters, see 'It's Time to Take Another Look at Fallout Shelters,' *House and Home*, July 1961, pp. 215–7.
- 49 Penny and David Hellyer, 'Keep Those Home Fires Burning... With Hobbies,' *The American Home*, December 1948, p. 52. For an examination of American fatherhood, see Robert L. Griswold, *Fatherhood in America: A History* (Basic Books, New York, 1993), Ralph LaRossa, *The Modernization of Fatherhood: A Social and Political History* (University of Chicago Press, Chicago, 1997), May, *Homeward Bound*, pp. 146–50, and Gelber, *Hobbies*, pp. 290–1. After 1948, official juvenile court case records and FBI arrests reflect a sharp increase in apprehensions and trials of young people for crimes ranging from burglary to murder. See, James Burkhart Gilbert, *Another Chance: Postwar America, 1945–1968* (Temple University Press, Philadelphia, 1981), p. 68.
- 50 US Department of Defense, Office of Civil Defense, *Fallout Protection*, p. 20. In the *Fallout Shelter Handbook*, Chuck West, for example, depicts a father and son inspecting tools in a completed shelter. West, *Fallout Shelter Handbook*, p. 81. The tragic ending of *Rebel Without a Cause* presented a popular parable for the disastrous effects of poor parenting. In the film, James Dean plays Jim Stark, a troubled teen whose father is cowed by his overbearing wife. Jim's father is weak and feminized; he wears women's aprons around the house. Jim recognizes his father's inadequacy both as a father and as a husband and he yearns for him to act like a 'real' man. 'If he had guts to knock mom cold once,' Jim laments, 'then maybe she'd be happy.' *Rebel Without a Cause*, Director, Nicholas Ray, 1955. For the role of the 1950s father in television and film, see Nina C. Leibman, *Living Room Lectures: The Fifties Family in Film and Television* (University of Texas Press, Austin, 1995).
- 51 'Family in the Shelter, Snug, Equipped and Well Organized,' *Life*, 15 September 1961, p. 105, also discussed in Henriksen, *Dr. Strangelove's America*, p. 208.
- 52 For an investigation into the gendered nature of do-it-yourself, see "Handyman, Handwomen," in Goldstein, *Do-It-Yourself*, pp. 67–82. Penny Sparke notes that feminine domesticity and the gendered division of labour during the 1950s were still predicated on "Darwinian ideas" of differences between men and women. Sparke, *As Long as It's Pink*, p. 169.
- 53 Goldstein, *Do-It-Yourself*, p. 74; U.S. Department of Defense, Office of Civil Defense, *Family Shelter Designs*, p. 19; 'Civil Defense: The Sheltered Life,' p. 23.
- 54 Chafe and Sitkoff (eds.) *A History of Our Time*, p. 224; Stephanie Coontz, *The Way We Never Were*, p. 161. For domestic duties as a sign of feminine resistance in the home, see "The Happy Housewife": Domesticity Renewed' in Sparke, *As Long as it's Pink*, pp. 165–186.
- 55 West, *Fallout Shelter Handbook*, p. 9 and p. 1. For an investigation into the intersection of consumption and national defence, see Stocke, 'Suicide on the Installment Plan.'
- 56 West, *Fallout Shelter Handbook*, p. 93; Federal Civil Defense Administration, *Grandma's Pantry Was Ready—Is Your Pantry*

- Ready in Event of Emergency?* (GPO, Washington D.C., 1955), for 'Grandma's Pantry,' see May, *Homeward Bound*, pp. 104–6; Rose, *One Nation Underground*, p. 142, and Winkler, *Life Under a Cloud*, p. 122. For women's role in civil defence, see Rose, 'The Gendered Holocaust,' in *One Nation Underground*, pp. 141–149; Oakes, 'The Nuclear Family,' in *The Imaginary War*, pp. 105–144, and McEnaney, 'The Nuclear Family: Militarizing Domesticity, Domesticating War,' in *Civil Defense Begins at Home*, pp. 68–87.
- 57 McEnaney, 'Atomic Housewifery,' in *Civil Defense Begins at Home*, pp. 108–113; Richard Gerstell, *How to Survive an Atomic Attack* (Combat Forces Press, Washington D.C., 1950), p. 76. Poor housekeeping could also adversely affect shelter morale. Chuck West relates the experience of the Perkins family, who spent seven days in a test shelter. Mrs Perkins realized that when 'dirty clothes began to pile up,' she and her family became discouraged. West, *Fallout Shelter Handbook*, p. 97.
 - 58 Men's work in this particular type of home was also unpaid. For investigations into the nature of masculinity, see James Gilbert, *Men in the Middle*; Michael S. Kimmel, *The History of Men: Essays in the History of American and British Masculinities* (State University Press, New York, 2005); Michael Kimmel, *Manhood in America: A Cultural History* (The Free Press, New York and London, 1996); Pat Kirkham and Janet Thumim (eds.) *You Tarzan: Masculinity, Movies and Men* (Lawrence and Wishart, London, 1993); and Pat Kirkham and Janet Thumim (eds.) *Me Jane: Masculinity, Movies and Women* (Lawrence and Wishart, London, 1995); Gelber, 'Do-It-Yourself,' p. 99.
 - 59 Richard Nunn, 'Hollywood Handymen,' *Better Homes and Gardens*, November 1957, p. 78, also mentioned in Marling, p. 7.
 - 60 Gelber, *Hobbies*, p. 294. For masculinity and do-it yourself, see Gelber, 'Do-It-Yourself.' In the post-war period the increased use of power tools ironically lessened the physical burden and skill level previously required to complete projects. 'Machines,' *Harper's* writer Eric Larrabee contended, 'are not destroying skills; they are putting them in the hands of every unskilled householder.' Companies such as Skill Corp and Shopmaster flooded the market with home tools. Black and Decker, one of the most successful tool companies, alone featured 150 different models, and driven by the popularity of their portable drill, earned an annual revenue of over \$35,000,000. 'Power tools: The Newest Home Appliance,' *Industrial Design*, February 1954, p. 31; 'Do-it-Yourself is Big Business,' *The New York Times*, 10 June 1966; *Time*, 2 August, 1953, p. 66; Gelber, 'Power Tools,' in *Hobbies*, pp. 278–82.
 - 61 William Hollingsworth Whyte, *The Organization Man* (Simon and Schuster, New York), 1956.
 - 62 For an investigation into the re-definition of man's place in post-war society as seen through science fiction, see Paul Wells, 'The Invisible Man: Shrinking Masculinity in the 1950 Science Fiction B-Movie,' in *You Tarzan* (eds.) Kirkham and Thumim.
 - 63 Arthur Schlesinger, Jr., 'The Crisis of American Masculinity,' *Esquire*, November 1958, p. 66.
 - 64 Michael Kimmel, '"Temporary About Myself": White-Collar Conformists and Suburban Playboys, 1945–1960,' in *Manhood in America*, 223–258. On the 'feminization' of manhood see Michael S. Kimmel, 'Consuming Manhood: The Feminization of American Culture and the Recreation of the Male Body, 1832–1920,' in *The History of Men*, pp. 37–59.
 - 65 Statistic quoted in Stocke, 'Suicide on the Installment Plan,' p. 46; George H. Gallup, *The Gallup Poll: Public Opinion, 1935–71* (Random House, New York, 1972), p. 1671 and p. 1732. On disappointing shelter sales and consumers rejection of civil defence, see Stocke, 'Suicide on the Installment Plan,' p. 53. Statistics over the exact number of shelters built vary. In 1961, *Newsweek* reported on an OCDM survey that estimated one million people, or only 1 per cent of the population, had built shelters. *Newsweek*, 7 August 1961, p. 48.
 - 66 US Congress, House Committee on Armed Services, *Civil Defense: Fallout Shelter Program*, Hearings before Subcommittee No. 3, Committee on Armed Services, House of Representatives (GPO, Washington DC, 1963), p. 4256.
 - 67 Leigh Bristol, 'Comments on Shelters,' *New York Times*, 12 October 1961; 'Shelter Plan Opposed,' *New York Times*, 13 November 1961.
 - 68 'Civil Defense: Coffins or Shields?' *Time*, 2 February 1962, p. 15; Winkler, *Life Under a Cloud*, p. 129; Karp, 'When Bunkers Last,' p. 89.
 - 69 'Shelter Protests Declared Popular,' *New York Times*, 29 November 1961; 'Methodist Bishops Protest Shelters,' *New York Times*, 18 November 1961; William L. Shirer, 'Let's Stop the Fall-Out Shelter Folly!' *Good Housekeeping*, February 1962; 'Rabbi Scorns Temple Shelters As Yielding to Moscow Threat,' *New York Times*, 22 October 1961.
 - 70 'Survival,' *Newsweek*, 6 November 1961, p. 19. *Newsweek* particularly took offence at the 15 December 1961 issue of *Life* that pictured, for example, a teenage girl lounging in the family shelter with a telephone in one hand and a Coke in the other.
 - 71 'Shelters: Jitters Ease, Debate Goes On,' *Newsweek*, 15 January 1962, p. 51.
 - 72 Dee Garrison, 'Our Skirts Gave Them Courage: The Civil Defense Protest Movement in New York City, 1955–1961,' in *Not June Cleaver: Women and Gender in Postwar America, 1945–1960*, Joanne Meyerowitz (ed.) (Temple University Press, Philadelphia, 1994), p. 210.
 - 73 Margaret Mead, 'Are Shelters the Answer?' *New York Times Magazine*, 26 November 1961.
 - 74 John Cheever, 'The Brigadier and the Golf Widow,' in *The Stories of John Cheever* (New York: Knopf, 1979), p. 505, quoted in Rose, *One Nation Underground*, p. 191. For shelters hidden in gardens see, 'Landscaping for a Front-Yard Shelter,' in 'Fallout Protection: Here are Case Histories of Family Shelters Recently Built in the West,' *Sunset*, November 1961, p. 108.
 - 75 William Bird, 'How One Old Shelter Got a Face-Lift—and a Permanent Home: The Bomb Shelter Installation at the National Museum of American History,' *Smithsonian*, April 1994, p. 52. For discussion of the bomb shelter on television during the Cold War, see Margot A. Henriksen, 'The Berlin Crisis, the Bomb Shelter Craze and Bizarre Television: Expressions of an Atomic Age Counterculture,' in *The Writing on a Cloud*, pp. 151–173. For a recent film about a family who spent thirty-seven years living in a fallout shelter, only to realize the nuclear war they were hiding from never happened, see Hugh Wilson, Director, *Blast from the Past*, 1999. For a recent television programme highlighting a bomb shelter, see, *The Simpsons*, 'Bart's Comet,' 5 February 1995, which features Homer and the people of Springfield commandeering Ned Flanders' fallout shelter.