



**HELLENIC
OBSERVATORY**
European Institute

A Critical Perspective on Economy, Modernity and Temporality in Contemporary Greece through the Prism of Energy Practice

Daniel M. Knight

GreeSE Paper No.81

Hellenic Observatory Papers on Greece and Southeast Europe

JANUARY 2014

TABLE OF CONTENTS

ABSTRACT	iii
1. Introduction	1
2. A Little Ray of Light: the photovoltaic initiative	7
3. Smoking Hot: a return to wood	17
4. Best foot (Backward and) Forward ...	21
5. Time to Say Goodbye?	29
6. Conclusions	33
References	36

Acknowledgements

I am grateful to Othon Alexandrakis, Stefan Bouzarovski, Renée Hirschon, Stavroula Pipyrrou, Charles Stewart, David Sutton and Rose Thomson for detailed comments on drafts of this paper. I am further indebted to Nicolas Argenti, Sandra Bell, Rebecca Bryant, Dimitrios Theodossopoulos and participants of the British School at Athens 'Balkan Topologies' conference and SEESOX 'Agency in the Time of Structural Adjustment' workshop for conversations on economic crisis and temporality. The research for this paper was supported by the National Bank of Greece Postdoctoral Fellowship at the Hellenic Observatory, London School of Economics and Political Science and an EPSRC 'Bridging the Gap' grant (EP/J501323/1) administered by the Durham Energy Institute.

A Critical Perspective on Economy, Modernity and Temporality in Contemporary Greece through the Prism of Energy Practice

Daniel M. Knight [#]

ABSTRACT

During the Greek economic crisis a focus on energy practice highlights the temporal complexities of local coping strategies. Re-launched in 2011, the European Union supported solar energy initiative encourages installation of futuristic, high-tech photovoltaic panels on fertile agricultural land. Entangled with intricate notions of neo-colonialism and occupation, the solar program provides extra income for disenfranchised farmers and much needed local employment opportunities. However, winter 2012-13 witnessed a return en-mass to 'archaic' open fires and wood-burning stoves that locals associate with material poverty, pre-modernity, and pre-Europeanization. Energy practice provides a prism through which to discuss increased social suffering and reassess the place of Greece in a modern Europe.

Keywords: **Energy, Economic Crisis, Temporality, Modernity, Belonging**

[#] Dr Daniel M. Knight, Addison Wheeler Research Fellow, Department of Anthropology, Durham University, email: daniel.knight@durham.ac.uk

A Critical Perspective on Economy, Modernity and Temporality in Contemporary Greece through the Prism of Energy Practice

1. Introduction

The Plain of Thessaly, central Greece, is sparsely vegetated at the best of times. In summer, as temperatures rise above 40 °c for weeks on end, one must seek refuge in the nearest *cafeneio* (coffee shop) to escape the scorching midday sun. Now, in December, the Plain is desolate. In some places, almost all the trees have disappeared. The road to the cemetery in the small village of Livadi, 5 kilometers outside of Trikala where I have conducted ethnographic research since 2003, is scattered with twigs and small branches – remnants of a recent search for firewood. Just beyond the headstones, glimmering in the winter sun, ten large photovoltaic (solar) panels stand on prime agricultural land. Since the solar program was introduced in 2006 the region has gone photovoltaic-crazy. From home installations to developments on agricultural land and large solar parks producing energy for international export, solar energy is heralded as the future for year-round self-sufficiency (Knight 2012b, 2013b, Knight and Bell 2013). Yet, as evening draws in on this cold December day, thick smog descends over Trikala as people light their open-fires and wood-burning stoves. Changes in energy practice represent just one of many paradoxes initiated by economic austerity. While the future-orientated new technology of photovoltaics is advocated by the national

government and European Union as a long-term solution to economic sustainability in Greece, winter 2012-2013 has witnessed a return en-masse to wood-burning open-fires (*tzakia*) and stoves (*ksilosompes*) last popular during the 1960s and 1970s.

The Greek economic crisis has made global front-page news since 2009, but often the socioeconomic consequences on peripheral regions are overlooked as media outlets adopt an Atheno-centric stance (Knight 2013a:148, 150, cf. Theodossopoulos 2013). This paper addresses crisis and temporality through the lens of energy practice as experienced by people in western Thessaly and offers a critique of the position of Greece in ‘modern Europe’. Two seemingly contrasting energy sources – high-tech photovoltaic panels and open wood-burning fires – have become symbols of the economic crisis. Photovoltaics are associated with clean-green energy, futuristic sustainability, ground-breaking technology, ultra-modernity and international political energy consensus. Open-fires conjure images of pre-modern unsustainability, pollution, and polarities of either extreme poverty or aristocratic luxury¹. In contemporary Greece both are symptomatic coping strategies for people negotiating the Troika-enforced fiscal austerity. Across the country towns are nightly engulfed in dense smog while on the surrounding plains glistening solar panels point to the heavens. Both photovoltaics and open-fires represent complex assemblages of temporality, one seemingly looking to the past, while the other is

¹ People acknowledge the irony that for the past twenty years open-fires have represented middle class urban opulence as much as ‘village life’. However, since the onset of economic crisis this symbolism has shifted and today wood-burning is understood as a mark of austerity. It is also interesting to note that both photovoltaics and *tzakia* are reincarnations of previous technologies – the solar heater introduced to Greece in the 1980s and the open-fire synonymous with village life throughout the mid-twentieth century.

markedly futuristic. However, on closer inspection both energy solutions are composite polytemporal ensembles incorporating intense historical consciousness, political rhetoric, concepts of modernity and sustainability, and multiple material trajectories. This has led people to reflect on their place in modern Europe and question their belonging to the neoliberal West (see Herzfeld 1987, cf. Candea 2010). The interface between society and technology during economic crisis facilitates a rethinking of temporality and contemporaneity (Latour 1993, 2005, Deleuze 1994, Serres 1995a, Bennett 2005, 2010).

New forms of energy production and consumption reshape the material, spatial, and temporal landscape (Knox, Savage, and Harvey 2006, Strang 2009, Harvey 2011). As both money and land are removed from circulation, shifting patterns in energy consumption entail changes “in markets, user practices, policy and cultural meanings”, contributing to new socio-technical assemblages (Geels 2010:495, also Shove 2003). Changes in technological infrastructure inevitably affect human behavior, resulting in unique localized understandings of historicity, crisis management, and economic futures. Considering this dynamism, the transformative impact of energy practice in a time of crisis is here analyzed as a critique of ‘the contemporary’ and reformulated notions of belonging. Energy practice is an assemblage of material and non-material connectivity to the past, present, and future. Greek perceptions of modernization and Europeanization are essential to unpacking this socio-political assemblage (cf. Kapferer 2010:125).

Unemployment, wage and pension cuts, a plethora of new taxes, rising inflation, fuel shortages, and crippling health service reforms have

irrevocably transformed livelihoods. I have written elsewhere how in Thessaly past crises such as the 1881 Ottoman annexation, 1941-1943 Great Famine, 1946-1949 civil war, 1967-1974 military dictatorship, and 1999-2000 stock market crash directly inform how people experience the current economic turmoil² (Knight 2012a, 2012b, 2013c cf. Collard 1989). Local perceptions of non-linear time are reflected in understandings of energy practice as hybrid assemblages where past and future are condensed. Human relationships to time are subjectively variable and often convoluted (Stewart 2003:482). As such, photovoltaics and open-fires may not be paradoxical strategies of crisis management, but disparate aggregates of social, scientific, and technical solutions dating from different periods (cf. Serres 1983, Serres 1995b:13, Strathern 1996:521)³. Changing energy practices provoke the emergence of spatial and temporal distortions on all scales, as established sociotechnical geometries are reassembled (Graham 2000:115, Castells 2000).

Currently in Greece, seemingly heterogeneous historical moments are knitted together to form the “whole” of contemporary crisis experience. Sourced from many temporal points – Ottoman and Axis occupation, the Great Famine, civil war⁴, military junta – these moments are fused together to form an assemblage of contemporaneity (Deleuze 1991:38). The heterogeneous nature of multiple temporal moments makes for an

² I have extensively discussed how the economic crisis is understood through the embodiment of past events with special reference to the Great Famine (Knight 2012a), Ottoman and Axis occupation and stock market crash (Knight 2012b). In these papers I have argued that only by focusing on local perceptions of time as non-linear, fluctuating and folding, can we better understand historical embodiment and polytemporality.

³ The electrical power grid itself is but one example of an assemblage, a composite flowing system of material parts with imperfections that represent the interaction between human and non-human agents (Bennett 2005:446).

⁴ See Loring Danforth and Riki van Boeschoten (2012) for recent anthropological commentary on the Greek civil war.

uncertain and unforeseeable future not necessarily bound to the present or to any singular specific historical era (Deleuze 1994, Hodges 2007). Due to the “sudden and unexpected change” enforced in the form of fiscal crisis (Grosz 1999:28), for Greeks the future has become uncertain, highlighted by diverse coping strategies and increased unease surrounding European belonging (cf. Faubion 1993:145). The fusion of the contemporary is a culmination of instances of organic and inorganic matter – an “active synthesis”, a “scrambling” (Stewart 2012:191) of past, present, and future. Distant events in linear time are brought into close proximity, into a singularly meaningful moment where past and future are superimposed within the present (Serres 1995a:57-59, Knight 2012a:350, Hirsch and Stewart 2005:261, Stewart 2012:193). In Thessaly, one way people are thinking through the complexities of proximate past and uncertain futures is through everyday energy practice.

Gilles Deleuze theorizes paradoxes of contemporaneity and coexistence that help clarify the concept of condensed historical moments, arguing that moments of the past are accessible through various avenues of remembering and embodying (1994:81-82, Sutton 1998, Hodges 2007:38, 2008). During the Greek crisis, the past is often undifferentiated from the present as multiplicities of a fragmented historical landscape merge to form a singularly meaningful moment (Serres 1995a:45, Knight 2012a). In the remaking of the social fabric during the crisis, the past is a haunting presence, forcing people to reflect on the position of Greece in a modern Europe. “A temporal fabric of cultural signifiers” (Hodges 2007:146), history shapes the experience of the present, and contemporary material encounters, notably energy paraphernalia, lead to people questioning their position still further. In

Thessaly, many believe their future – the future promised over the last thirty years – is over; it is already past.

Contributing to recent debates on economic uncertainty (Appadurai 2012, Graeber 2012, High 2012), neoliberalism (Clarke 2008, Klein 2008, Peck and Theodore 2012, Wacquant 2012), temporality (Stewart 2003, 2012, Hodges 2008, 2010, Sutton 2001, 2011) and energy policy (Bouzarovski 2009, Bouzarovski, Sarlamanov and Petrova 2011, Bouzarovski and Bassin 2011, Bozhilova 2010, Shove 2009), this paper assesses energy practice as a polytemporal assemblage through which to further explore the complexities of crisis experience. Energy practice can also provide a significant contribution to the long-running debate as to where Greece ‘belongs’ in relation to Europe, the West, and modernity (Herzfeld 1987, Faubion 1993, Argyrou 1996, Hirschon 2011). The paper adds credence to the argument that the economic crisis should not be viewed as a monolithic event as regularly portrayed through international mediascapes (Appadurai 1990, see Knight 2013a, Theodossopoulos 2013). Flows of energy, investment capital, material objects, and political rhetoric endow energy practice with temporalities that cut across current economic austerity. With unemployment among people under 25 years of age hitting 60 per cent in February 2013, increasing redundancies, the break-down of family support networks and hunger taking hold in many regions, energy provision has become a locus of public debate. The urgency to adopt alternative energy solutions is enforced by increasing material poverty in central Greece through which people provide critiques of the past, present, and future.

In order to set the ethnographic scene for an analysis of temporality and modernity I will first outline the paradoxes of contemporary energy practice – the photovoltaic program and the return to wood-burning fires. I intend to demonstrate how local people discuss the precarity of economic crisis by reflecting on both moments of the past and possible futures through energy paraphernalia. The second part of the paper will filter these findings into a discussion of how people in Thessaly view Greece's place in a modern Europe, reassessing the seminal work of Michael Herzfeld (1987) and James Faubion (1993) on the ambiguity of Greece in the contemporary geo-political landscape.

2. A Little Ray of Light: the photovoltaic initiative

The Greek photovoltaic program was first launched in 2006, three years before the nation's fiscal problems made global front-page news. In 2011 the government re-launched the scheme amidst considerable fanfare at the prestigious Megaro Mousikis in Athens, branding photovoltaics the pathway to repay debt and decrease national deficit (Knight and Bell 2013:4-5). Solar was framed as a long-term solution to economic sustainability. The photovoltaic program ranges from large-scale solar parks producing enough energy for international export (up to 10 gws by 2050 in one park alone), to self-sufficient home installations (up to 10 kw/h). Energy export from large developments has been further prioritized since the denouncement of nuclear generation by Germany in 2011, with politicians promising the permanent closure of all German nuclear plants by 2022. There are also substantial developments on agricultural land where crop production is currently financially unsustainable due to the collapse of markets as a

consequence of economic squalor and Troika-enforced austerity and the uncertain future of the Common Agricultural Policy (CAP).

A diversification program supported by the European Union, Greek agriculturalists without a market for their crops are encouraged to install photovoltaic panels on their land. The initiative has been met with mixed feelings as the necessity for a stable financial income provided by feed-in tariffs is balanced against notions of colonization, occupation and dispossession (Knight 2012b, 2013a, 2013b, Knight and Bell 2013). The rich history of land tenure on the Plain of Thessaly, acute historical consciousness, and issues of national food sufficiency stretching back over 200 years provide the “background noise” (Serres 1995b:71-72, da Col 2012:S189-S190) to strategic decisions during the crisis. Future livelihoods are assessed according to historical events, as people form intriguing perspectives on new socio-technical assemblages.

The photovoltaic drive is a complex weave of state policy, nationalized companies, private corporate organizations, international investors, small and medium enterprises, local community activists, NGOs and independent research groups. Energy governance, fiscal responsibility, and entrepreneurial opportunism operate within these networks (Nader 2012). The international impact of the Greek initiative is emphasized by the fact that Greece has surpassed its 2020 goal for solar energy production (from 2009 to 2012 annual photovoltaic energy production increased from 53mw to 1018.29mw) (Hatziargyriou 2012).

German investors have significant interest in large and medium scale photovoltaic developments in Greece and have financed parts of the failing major energy company Dimósia Epicheírisi Ilektrismoú (DEI).

Installing photovoltaic panels on private agricultural and public land is viewed by locals as selling-off Greek assets to foreign capitalist prospectors. Notions of colonization are exacerbated as installation companies primarily advertise German products as this rhetoric sells reliability and reassures the consumer of the quality of installment (cf. Fontefrancesco 2012)⁵. The rich tapestry of historical consciousness apparent throughout Greece (Stewart 2003:481, 2012) is entwined with the especially powerful narrative of hunger currently prominent in the region. The Great Famine of 1941-1943 during German occupation is a topic at the forefront of public imagery (Knight 2012a, 2012b) and provides a competing justification for the installation of solar panels on private property. Famine is a genuine fear in central Greece during the economic crisis and people are presented with a ‘rational’ decision toward a purportedly stable monthly income for sacrificing their agricultural land⁶. Agriculturalists now face the daunting prospect that crop production is no longer a viable livelihood strategy beyond subsistence. Farmers are “growing photovoltaics” (*fitronoun fotovoltaika*) on their land as this is perceived to be the only way to avoid certain famine (cf. Gilsean 1996:121). In the salons of European government, solar energy is heralded as the economic savior of a failing state, viewed as a long-term solution to fiscal austerity, international dependency, and European energy security.

⁵ Low-cost Chinese panels are regularly installed without the knowledge of the consumer in order to provide further maintenance work in forthcoming years. Michele Fontefrancesco (2012:89) argues that there is an inherent link between the nation where an object is manufactured and notions of quality and locality.

⁶ In the early 1950s Dorothy Demetracopoulou-Lee (1953:108-109) argued that generally Greeks preferred to possess something tangible in the present rather than plan for long-term sustainability. This was due to the turbulent recent history of the Greek nation-state.

The average monthly income from selling solar energy to Greek power companies is currently greater than the revenue from crop production, private business ventures, and many pensions. The annual untaxed income on a 10 kw/h home development at the February 2012 feed-in rate was 7,200 euro, decreasing to 6,840 euro with the August 2012 price. However, if the contract with DEI is signed before each six-monthly deadline the price per kw/h is stable for a 25 year period. The average loans taken out by customers for the photovoltaic installations are, as of summer 2012: 25,000 euro for home developments (10 kw/h), and 180,000 euro for field developments (100 kw/h). These prices have decreased significantly from five years previous, when an average home installation cost 60,000 euros and a field development (100 kw/h) cost 500,000 euro⁷. The largest outlay on a photovoltaic installation during my research in 2012 was 750,000 euro on a development near Larisa, however on a national level there are innumerable projects exceeding this amount.

There is substantial risk involved with placing one's future in photovoltaics, especially on long-term contracts for panels based on agricultural land. As Giannis, 66, explains:

“We (the famers) have to take a gamble on our future. Our land is lying there idle, it is fertile but we cannot sell our grain. My children and grandchildren have to eat every day. My eldest son has lost his job working in the local government offices and the future of his child, my grandchild, is now uncertain ... If I put photovoltaic panels on my land then the immediate future looks more secure. My pension has been cut

⁷ In contrast to home installations, energy generated by photovoltaic panels on agricultural land does not sustain any energy consumption in the investor's property.

by two-thirds and now the land is all I have. It pains me to place German manufactured products on land that my family have fought so hard for over the past century (until the 1930s it was part of a large landed estate, *tsifliki*) but my family will go hungry if I don't act now. I now say that I "grow photovoltaics". I "grow energy".

"When we were occupied during the Second World War 500,000 people died of famine. We all know this. My grandchild knows this. What we are living through fills us with the same pain, the same fear. I fear for my family's future and the lifeline we have been thrown is photovoltaics. If I do not adapt and take this huge risk then we will end up like those 500,000. Just another statistic, another victim of another crisis ... Photovoltaics is a new technology and potentially provides a good future for us. I do not trust the politicians and bureaucrats that sell us this program, but it is the only option at this moment."

Giannis provides a simultaneous critique of past, present, and future and his account is by no means unique. Concepts of possession, occupation, and hunger are informed by nationalized narratives of historical events and intergenerational stories that are relived through the prism of the present photovoltaic initiative. Giannis conflates the current economic crisis with the Great Famine and Axis occupation of the 1940s (see Knight 2012a, 2012b). 'The crisis' is at once the tragedies of the 1940s and present-day Troika-occupied Greece. His experience of the contemporary is lived through vivid history with unclear future trajectory; it is an assemblage, a boundless cloud of simultaneity to which the photovoltaic program may provide direction. By condensing

the Ottoman-era *tsifliki* system of landed estates⁸ with Axis occupation and photovoltaic installations he frames the diversification program as a necessary route for survival.

Michalis, a 55-year-old farmer living near Karditsa, provides another perspective on the historicity involved in photovoltaic diversification:

“I am proud that I have the ability to change my lifestyle towards the future. I would not have chosen to install photovoltaic panels on my home and land, but they are symbols of the future rather than symbols of destitution. I want to help my family, and help my nation in this moment of crisis. I am too old to pick up my gun and start a revolution. My father fought during the Second World War against occupation, but this time the intelligent thing is a little collaboration. I know what I am doing may seem manipulative, like colluding with the enemy, but nowadays putting food on the table for my family is more important, I cannot let them starve. While everybody else argues about who is to blame for this terrible crisis I have put all my assets into creating some form of future for my family. We were not defeated by Ottoman or German occupation, civil war, or military dictatorship. Photovoltaic panels are a sign of my defiance. I will overcome the economic crisis.”

Michalis’ narrative resonates with established patterns of “defending the family” identified by John Campbell. Campbell (1964) distinguishes between the responsibilities of adolescents (*pallikaria*) and married

⁸ Originally land grants made by Ottoman sultans to Muslim settlers in Turkish-occupied lands, *tsiflikia* were large landed estates operating in Thessaly from the sixteenth century. At the end of the seventeenth century, *tsiflikia* became large private properties where the landlord held rights over whole villages whose villagers became his tenants (*colligi*). After the annexation of Thessaly to Greece in 1881 the *tsiflikia* were purchased by Greek entrepreneurs of the diaspora and living conditions for the *colligi* deteriorated drastically (Aroni-Tsichli 2005:26).

men. A *pallikari* must assertively exhibit attitudes of manliness, he must be “prepared to die, if necessary, for the honor of his family or his country” (1964:279). As such, the *pallikari* is the ideal of manhood. However, after marriage a man must exhibit characteristics of cleverness (*eksipnada*) and cunning (*poniria*), demonstrating a quickness of mind and a degree of foresight in protecting his family (ibid.:280-282). Today, these attributes are still legitimate and praiseworthy where the family is the object of protection, even if this means forgoing conscience and pride. Michalis has shown considerable foresight by investing in photovoltaics, despite historically embedded reservations about “collaboration”.

Another paradox of the solar program lies in the general acknowledgement that a major cause of the current socioeconomic crisis in Greece was the unregulated nature of unnecessary bank loans from 1981 to 2007. Homeowners and landholders comment they are prepared to take major loans even in a time of socioeconomic instability as they perceive this scheme to be the only financially productive program currently running in central Greece. They are living with the crisis constantly and are unable to ‘put their lives on hold’. People argue that they must continue ‘as if’ things are under control (Gilsenan 1996:59, cf. Berlant 2011). Many people are openly cynical about the sustainability of photovoltaics and it is generally believed that the 25- or 50-year contracts to pay an agreed rate will not be honored. Experts in the solar industry also admit that the photovoltaic bubble may be about to burst. However, as Sakis, 44, states; “we can now only afford to think about tomorrow. Once upon a time this meant the next twenty years, now it literally means the very next day”. The rhetoric of market

persuasion (cf. Gudeman 2009, Kirtsoglou 2010), coupled with overt historical consciousness on themes such as famine, legitimizes the decision to diversify from farming to photovoltaics.

The long-term nature of the contracts contradict general and professional opinion that the program is unsustainable. Due to the rapidly increasing popularity of the current solar program, much agricultural land – Thessaly has long been known as “the bread basket of Greece” (Bennison 1977) – has been taken out of circulation. This raises questions for local and national self-sufficiency in grain vital to sustainable socioeconomic recovery, and incites rich narratives of belonging through historically-endorsed notions of land and soil (see Theodossopoulos 2000, Bryant 2010:30-31). By encouraging energy security through the multi-scale solar program, locals concede that food security may be threatened, echoing similar problems throughout the agricultural history of modern Greece pre-dating the annexation of Thessaly from the Ottoman Empire in 1881. There is also a concern that agricultural skills passed down intergenerationally will be forever lost. Nevertheless, people are persuaded to take decisions according to a European Union-advocated neoliberal market ideology. The necessity imposed by crisis and historically-endorsed fear of famine provide sufficient explanations for an exchange that would otherwise be non-equivalent. ‘Growing photovoltaics’ highlights complex temporalities and material and non-material assemblages. People must make their way toward some form of livelihood while the chaotic social and economic currents of crisis hurl them in uncertain directions (Narotzky and Smith 2006:122).

“Tomorrow I have to put food on the table for my children and pay the electricity bill. Photovoltaics are a new survival strategy, something that was beyond my imagination three years ago. Now I get a stable income and can survive on a daily basis ... I am worried that my property will not be passed down in inheritance, it may be repossessed, or the techniques of working the land may be lost forever, but for now I must bow to the will of the European land barons, the new *Tsiflikades*. I have an internal battle with my conscience as to the best route to take for my future. History is contradictory but there is just a chance, a small chance, that green energy could be our savior, a path to some form of future. We will see” (Lazaros, 62, Karditsa).

Alternative energy solutions during the current economic crisis lead to an understanding of contemporaneity as an assemblage of historical and futuristic parts (Serres 1995a:47, 1995b:2). Crisis coping strategies are assemblages of materiality and conscience at the interface between society and technology; photovoltaics represents a possible future based on European ‘green energy’ ideals and technological innovation (cf. Isehour 2010). Contemporary energy solutions are composed of historicity and futuricity, facilitating a topological (folded) rather than geometric (linear) understanding of crisis management. The solar drive and the return to open-fires are based on conflicting temporal ideals. Michel Serres provides an example of the late-model car as an assemblage that is formed from a

“disparate aggregate of scientific and technical solutions dating from different periods. One can date it component by component: this part was invented at the turn of the century, another, ten years ago, and

Carnot's cycle is almost two hundred years old. Not to mention that the wheel dates back to Neolithic times. The ensemble is only contemporary by assemblage, by its design, its finish, sometimes only by the slickness of the advertising surrounding it" (1995a:45).

To approach energy initiatives during the economic crisis as events of singular unity or direct individualist choice would be to ignore inherent paradoxes. Parts of the obsolete, the current, and the futuristic are pleated into an experience of a critical event. The decision to install solar panels is complex and entwined with competing facets of historical consciousness and future livelihood desires. Decisions are informed through a series of "imaginary temporal excursions" both to the past and future (Stewart 2003:483). Political point-scoring and enforced austerity measures have led to numerous triumphant announcements of recovery schemes that have remained unimplemented (Knight 2013a). Advertising in a Serresian sense has thus been a central aspect to the scale, and relative success, of the photovoltaic package. Political rhetoric has been supported with practical action as funds have been made available and a media campaign eventually launched. The 'packaging' of photovoltaics is embedded within concepts of sustainability, reliable income, technological innovation, modern Europeanism, supporting a national cause, and Greeks being at the cutting-edge of the futuristic green revolution.

The critique of economic turmoil provided through the lens of energy initiatives is thus polychromic, polytemporal, and polymaterial (Serres 1987, 1995a:60, Bloch 1998:120). To paraphrase Serres (1995a:58), perhaps it is not coincidental that in Greek *kairos* means both "time" and

“weather”, signifying the turbulent topological fluctuations in temporal and material flows.

3. Smoking Hot: a return to wood

During summer 2012, Dimitris, a 40-year-old car mechanic and father of two, commenced construction of an open-fire heating system (*tzaki*) in his home. The price of petrol required for central heating (*kalorifer*) was dramatically increasing and his business was only bringing in around 30 euros a month, before rent, utility and sustenance payments⁹. Over the course of two months Dimitris built the fireplace, ventilation system and flue, connected it to the hot water system, and installed a thermostat. He also bought a new handsaw, something he has just used to cut down his neighbor’s crab-apple tree for firewood.

“People have cut down so many trees. In some places there is not one left standing. Now they are burning whatever they can lay their hands on – plastics, household waste, old chairs, books, and photographs, and we still think of it as ecological ... what else can we do? The cost of petrol for the central heating is far too high and nobody is making any money at work ... At night you cannot breathe in Trikala, the air is so thick with smoke from the fires. You cannot see the end of our street” (Dimitris, 40, Trikala).

Although Dimitris’ business is all but bankrupt, his mother continues to support him, his wife, 5-year-old daughter, and 3-year-old son through her severely reduced pension and a lifetime of savings. In the current

⁹ As a private mechanic Dimitris’ income fluctuates on a weekly basis. His mother provides substantial financial support during ‘hard times’ and Dimitris remains in business as a result of family support networks that provide loans ranging from 50 to 2000 euros.

economic climate of soaring unemployment and constant tax increases, livelihood diversification is both commonplace and necessary (Knight 2014). Dimitris has created a side-line selling and installing motors for wood-burning heating systems which he stores in his garage alongside exhaust systems and turbo chargers¹⁰.

“There are now more than 30 shops in Trikala (population 51, 862) selling all forms of wood-burners. You can buy wood or pellets from any one of the street newsstands (*periptera*). The trouble is that this business initiative is no longer innovative. Everyone has the same idea, but the prices remain very high. The demand is also very high, but the market is swamped. People have begun buying all forms of fire systems, from cheap free-standing stoves to whole industrial-scale systems. All the trees on public land, the private allotments, even in the children’s playground, have been cut down. At weekends you see cars and pick-up trucks stacked full of firewood. Some people have been stopped by police, fined, and forced to empty their spoils by the side of the road”.

In December 2012, a local news bulletin reported that research conducted by the University of Thessaly revealed that air pollution levels in some parts of the region are 30 to 40 times the recommended limit. Local politicians in Volos and Karditsa appealed to the conscience of all citizens not to use unregulated *sompes* and *tzakia*. The bulletin was followed by an advertisement: “buy a woman’s watch and get a free wood-burner (*ksilosompa*)”.

¹⁰ The increasing use of *tzakia* and *ksilosompes* is by no means restricted to the Greek periphery. One of the worst affected areas is Athens where pollution levels skyrocketed in winter 2012-2013. There has been mounting pressure on the Greek government to implement strict regulations on the use of open-fires, as well as calls to return petrol prices to their 2010 levels to discourage the installation of wood-burners. Politicians are also threatening to impose extra tax on people who have installed wood-burners in their homes.

Giota, 68, from Kalampaka, recounts the days when open-fires were commonplace,

“Now people are just burning anything and it is so dangerous. People are choking on the thick air – my daughter has asthma and has recently experienced serious problems breathing ... Back when I was a child we all used to have wood-burning fires, the whole village, but we knew what to burn and there wasn’t the same feeling of desperation. But we thought this time had passed, we are Europeans now. *Tzakia* are symbols of the past and of our poverty, unless you are a very rich person from Athens that thinks it is fashionable. I saw a report on television that compares what is happening in Athens with the smog from *tzakia* and *sompes* to the industrial revolution in England when London transport was stopped for two days as people could only see two meters through the smoke ... We feel as though we have been forced back in time to another era of Greece, an era before the dictatorship (1967-1974) when Greece was cut off from the world. We are now supposedly in ‘Europe’ but we are going backwards. Europe does not care about the impact of austerity on local people who may be starving or freezing to death. And the elites in our government for some reason continue to support them. Something is wrong; like we say, ‘there is no smoke without fire’.”

Firewood is now imported to Thessaly from as far away as Bulgaria and the Former Yugoslav Republic of Macedonia where it is purchased in bulk at low prices by opportunistic entrepreneurs to be sold for up to 500 per cent profit south of the border (cf. MacGaffey 1998). Wood is also transported in articulated lorries from the forests around Metsovo,

Epirus, just over the regional border, and sold for 180 euros per tonne in western Thessaly. Clandestine deliveries of illegally-felled trees regularly take place in the dead of night by men in convoys of black-out pick-up trucks. Torrential winter downpours coupled with an increase in illegal logging have recently caused substantial flooding and landslides in Thessaly and Epirus as a result of deforestation. Wood-burners are also imported across the Balkan borders to be sold in showrooms in central Greece.

Tzakia and photovoltaics have both generated opportunities for second jobs and side-line business activities. Technicians and car mechanics now work for companies importing and installing solar panels, or have diversified to install *tzakia*, ventilation systems, and thermostats. Private businesses importing and installing photovoltaic panels and *tzakia*, as well as agencies dealing exclusively in preparing the paperwork and negotiating the complex bureaucratic channels, especially for solar, are flourishing in western Thessaly.

Vassilis, a building contractor from Mouzaki, has set up a prosperous photovoltaic company. The top floor of an old warehouse is dedicated to his new solar panel business. He and a team of three technicians import and install solar panels in homes and fields. He set up his business in 2007 when he first identified a rising demand for renewable energy technology in western Thessaly. Dimitris the mechanic has decided to buy, sell, and install motors for open-fire ventilation systems and provides a commentary on the need for business diversification:

“We are trying to get by as best we can, to put our skills to use. My car business is bringing in between 30 and 50 euros a month, before I pay for rent, electricity and the extra taxes. I had installed a *ksilosompa* in the workshop many years ago and now I have built a *tzaki* in our house. If I can do it for myself, I can do it for other people too. It is better than sitting around doing crosswords all day ... We cannot afford to be selective about our work. Yesterday I got my first order for a ventilation system which I will install ... Back in the summer (2012) I was thinking about working on photovoltaic panels. I know how to install them and there seems to be a demand. It would have been a little extra money on the side. But, like the *sompes* and *tzakia* now, the market is swamped ... Energy is something that everybody needs in order to live, that is why all the new taxes introduced as part of the Troika bailout conditions get added to our DEI electricity bill – because if you don’t pay the bill you won’t have electricity. Photovoltaics and *tzakia* are ways to try and get around the economic problems while still providing a necessity. You know, if you live in an apartment block and one tenant doesn’t pay their contribution to the energy bill then the whole block gets cut off. That is why self-sufficiency is so important ... But now everybody is trying to diversify and there is not enough work for us all, so we just pick up what we can. And all this when we don’t even know if tomorrow there will still be a Greek state, a European Union or another civil war!”

4. Best foot (Backward and) Forward ...

The two forms of energy practice currently co-existing in Thessaly have reignited debate concerning Greek geographical, political and ideological belonging that has a considerable academic lineage. On the fringes of

Europe, dichotomies have been regularly drawn between Orient and Occident, East and West, and Modern and Ancient (Demetracopoulou-Lee 1953, Herzfeld 1987, Faubion 1993, Argyrou 1996, Hirschon 2010)¹¹. The diverse forms of temporality involved with the two energy solutions resonates with issues of modernity and belonging discussed nationally since World War Two. When Charles Baudelaire brought the term ‘modernity’ to academic attention in his 1859-1860 essay *‘The Painter of Modern Life’*, he defined it as the “contemporaneity of presentness”, arguing that “a stamp of time”, “a presentness” is captured in all entities at the point of production (Baudelaire 1986:37-39, Sayer 1991:9). In a similar manner that one may discuss multiple temporalities, so one can talk of multiple modernities; modernization too is a discourse about the present and possible futures, with inextricable reference to the past (Moore 2004:81, 85, Faubion 1993:145). In new energy initiatives, modernity is apparent as the contrasting commoditization of time and space (see Giddens 1981, 1991).

In Greece, modernization (*eksygchronismos*) encompasses understandings of economic as well as social advancement and stands for the historical and cultural commitment of the Greek people to the West (cf. Demetracopoulou-Lee 1953, Clogg 1992:179, 181, Argyrou 1996:3, 153, 2002:100-101, Theodossopoulos 2006). Political rhetoric over the past thirty years has revolved around two ambiguous poles – Greeks as the ancestors of modern Europe, and Greeks residing on the margins of the continent (Herzfeld 1987). Modernity plays a central role

¹¹ Renée Hirschon (2010) has noted a multitude of dichotomies that distinguish modern Greek society from other ‘Western’ contexts. She specifically highlights the overlap between national and religious identity and secular and religious domains (2010:295, 298). For Hirschon, these represent peculiarities in a Western context and have roots in Greece’s historical trajectory from the Ottoman Empire (see also Theodossopoulos 2013:217).

in the struggle for identity and power, as an idiom caught between Occident and Orient, ‘the West’ and ‘the Other’ (Argyrou 1996:2, Kirtsoglou 2010, Theodossopoulos and Kirtsoglou 2010). Arguing for the plurality of modernity, James Faubion (1993:133) notes that “the two great occidental catalysts of governmentalism – the Protestant routinization of personal conduct and the industrial automation of production – have had ... relatively little impact on Greece” meaning that Greek modernity (if we agree such a thing exists) has been formed through a different path somewhere between occident and orient. With Troika-enforced austerity, failing European fiscal unity and increasing social poverty, questions of European belonging and modernity have never been more poignant and are regularly discussed through the prism of energy practice.

Greece has been repeatedly hailed as the birthplace of civilization and the ‘living ancestor’ of all contemporary European nation-states, while being bombarded with political and geographical questions concerning ‘cultural belonging’ (cf. Herzfeld 1987, Clogg 1992, Stewart 2003:485)¹². The Ottoman Empire was considered by Renaissance Europe as the “embodiment of barbarism and evil”, thus historically and culturally speaking, Greece is symbolically both holy and polluted (Herzfeld 1987:7). As Michael Herzfeld once argued “Modern Greece does not fit comfortably into the duality of Europeans and Others, especially as Greeks are themselves ambivalent about the extent to which they are European” (Herzfeld 1987:2, also Faubion 1993). This ambivalence toward Europe seemed to have been overcome through thirty years of

¹² Jon Mitchell (2002) discusses the case of Maltese European belonging and ambivalent cultural identification with ‘the West’.

economic prosperity and European integration (Greece joined the European Community in 1981 and the eurozone in 2001)¹³, yet the current crisis has reopened the debate.

The economic crisis and return to poverty for many citizens has led to media speculation of Greek commitment to “Europe” and associated paraphernalia (Knight 2013a). In terms of energy, one foot is now striding confidently towards the rapidly expanding future of technology and sustainability, photovoltaics, while the other is staggering back towards archaic consumption that the people themselves associate with poverty and pre-Europeanization. This duality is emphasized by changes in other livelihood practices, such as the increasing amount of people growing their own fruit and vegetables on small plots of land for greater self-sufficiency, triggering reflection on images of European “resemblance and difference” (Theodossopoulos 2006:6). Subsistence food production is itself informed directly by historical-endorsed notions of hunger and famine.

During discussions preceding Greece’s 1981 admission into the European Community, a British foreign office minister stated that Greece’s entry would be “a fitting repayment by the Europe of today of the cultural and political debt that we all owe to Greek heritage almost three thousand years old” (Clogg 1992:2, Faubion 1993:245, Herzfeld 1986:4, 1987:1, see also Kirtsoglou 2010, Pryce 2012). This sentiment was echoed by other member states and was reinforced by how then Greek Prime Minister Konstantinos Karamanlis exploited feelings of guilt at Europe’s inertia during the dictatorship of 1967-1974, which led to an

¹³ For a discussion of Greek entry into the eurozone see Thomas Malaby (2003)

easier path for “the country they (Europe) liked to hail as the fount of European Civilisation” (Clogg 1992:177).

Europeanization challenged long-existing political, economic and ideological structures (Hirschon 2008, 2010:289)¹⁴. Greeks expected economic and political security from European Community and eurozone membership, banishing notions of an ambivalent European identity and laying to rest geographical, historical, religious, and political ambiguity (cf. Herzfeld 1987, 2005:19, MacDonald 1993:2, Theodossopoulos 2006:7). The promise of modernization, contemporaneity, and a stable future trajectory was superficially delivered during thirty years of uninterrupted prosperity. Far from being caught between familiar and unfamiliar, belonging and exclusion (Herzfeld 1987:1-7), political and fiscal unity with Europe was seen as ensuring socioeconomic prosperity for Greece through European solidarity (Pryce 2012). Yet, as documented extensively by Herzfeld in the late 1980s, the history of European-ness and modernity in Greece is short when compared to other nations (see also Hirschon 2011). Changing livelihood strategies during the crisis, including the mass return to wood-fuelled heating, has made people reassess the relationship to Europe and associated notions of modernity and prosperity. In Thessaly, people once again feel trapped between past and future, imprisoned by contrasting images of Europe – the giver and the taker-away. This is dramatically reinforced through the visual images of gigantic photovoltaic panels funded by a European Union program, and towering

¹⁴ Faubion argues that marginal industrialism in urban centers such as Athens suggests that modernity in Greece is political not economic (1993: 9-10, 122). However, even the Greek political sphere is still noticeably ‘elsewhere’ rather than ‘of the occident’. The modern nation-state was built on a guarded sovereignty of the Athenian elite through close links to the diaspora, as well as patronage and favour exchange, and remains this way to the present day (Faubion 1993:122, 133, 137).

piles of firewood, a symbol of European-enforced austerity. In Western Europe modernity has been defined in terms of the linear progress of time resulting with bureaucratic states treating time as something to be 'managed' (Faubion 1993:148). Yet Greeks have been sceptical of the 'myth of progress' and championed the synthesis of tradition, living and dead, endogenous and exogenous. Greek modernity has therefore never been in line with the Baudelaireian idea of new production but rather a vulnerably synthesis of discoveries and re-discoveries of the past (Faubion 1993:152), something noticeable in the discussion of energy paraphernalia.

In her discussion of the polychronicity and multitemporality of objects in neighboring Cyprus, Rebecca Bryant argues that objects "play a role in mediating history and memory because of the ways in which they aid us in reorienting the relationship of past, present, and future". Objects contain "a temporal dynamism capable of exploding, imploding, twisting or braiding the past" (Bryant forthcoming, also Stewart 2012). Contrasting artifacts – solar panels and *tzakia* – come to symbolize the contemporary views on time and temporality, they are "time capsules" with the ability to transport actors on different trajectories (Stewart 2003:487). It is around these material objects that multifaceted "indigenous historicization" is centered (Stewart 2012:190). Ioanna, 50, has installed photovoltaic panels on her home and farmland on the outskirts of Trikala:

"The photovoltaic program promises a stable income, something which is difficult to find nowadays. With the support of the European Union there is more chance that the contracts will be fulfilled and less money

will be lost to the corrupt hands of politicians along the way ... When Andreas Papandreou took us into Europe in the 1980s many things were lost from our culture. It became all about money, showing that you had money and buying as much status as possible. Everybody that wanted a job got a job and loans were so easy to come by. But without realizing it we were loaning money from the next generation. The next generation will have to pay for the national craze in everything “European” and “modern”. Here (in Trikala) nobody properly understood how capitalism worked and we spent our children’s future. All the technology and material artifacts we purchased were bought with money that nobody had, they were things nobody could afford. We sacrificed our grandchildren’s future for the sake of modernity and technology, in the name of Europe ...

“In Europe everyone loved the Greeks as the ancestors of the Ancients, that land of sun and *filoxenia* (hospitality) – of course we benefitted from all the tourists and European Union agricultural initiatives. For thirty years we had freedom, we could have whatever we wanted, but Europe has also provided us with expectations that we can no longer satisfy. There is a generation of people that believe that everything is just offered to you on a plate, without hard work; that a university degree, a public sector placement, and a substantial pension are a birth-right. This crisis is a reality check ... unregulated modernization has come at a price. Some things that Europe offer still have worth – the majority of people, including myself, want to remain part of the eurozone and the European Union. Greece is part of the European continent after all so how can we say that we are not part of Europe ...

“The photovoltaic program seems to be a viable solution in the short-term and the investment is much needed at this time. It may help stop us returning to the situation of the 1960s and 1970s, although it is not a solution on its own. Some people say that another military junta is precisely what is required to solve this crisis, but they are not looking at the bigger picture. Think of where we were thirty to forty years ago and where we are now. We cannot write all that off immediately, but must adapt our style of living for the current situation ... we have survived much worse in the past. Saving money is now the priority for every family in order to continue to provide food and shelter. At this moment a combination of European-backed energy technology (photovoltaics) and “old” ways of coping with crisis (saving money through wood-burners) is the best way of dealing with a desperate situation.”

The negotiation of Greek accession into the European Community came at the height of debates concerning nationalism. The motto of the conservative New Democracy party read, “Greece belongs to the West”, while their main political opposition, socialist PASOK, replied with “Greece belongs to the Greeks”, painting a picture of incompatibility (Clogg 1992:179, Yalouri 2001:46). Greek entry into the European Community and adoption of Thatcher-Reagan neoliberal policy was understood by some as a betrayal of Hellenism (Clogg 1992:154, Yalouri 2001:46, cf. Candea and da Col 2012:s14), a phrase which is prominent in discussions of current economic austerity far beyond the rhetoric of xenophobic right-wing political parties¹⁵. Austerity at the hands of

¹⁵ See Kirtsoğlu, Theodossopoulos and Knight (2013) for analysis of the Greek far-right Golden Dawn party and Dalakoglou (2013).

opaque inanimate political bodies has reignited debates about independence and belonging.

5. Time to Say Goodbye?

The quote below from Herzfeld, writing in 1987, perhaps surprisingly captures the sentiment of many Greeks in 2013.

“The Greeks of today, heirs – so they are repeatedly informed – to the glories of the European past, seriously and frequently ask themselves if perhaps they now belong politically, economically, and culturally to the Third World. Whether as the land of revered but long dead ancestors, or as the intrusive and rather tawdry fragment of the mysterious East, Greece might seem condemned to a peripheral role in the modern age” (Herzfeld 1987:3).

When I commenced fieldwork in Trikala, Thessaly, in 2003, Herzfeld’s perceptions of ambivalence towards Europeanization would have seemed unconvincing in the new millennium. Futuristic technologies, such as the internet, European Union supported infrastructure schemes, European fiscal unity, and the impending Athens Olympic Games were opening up even the remotest areas to everything the West had to offer. Although since 2009 Greece has certainly not been on the periphery of European political and economic speculation, the question of belonging to the “First” or “Third” world has resurfaced on local and national

stages as people rhetorically pose the questions “Who are we?” “What have we become?” “Where are we now ... *when* are we now?”¹⁶

Writing in the 1950s, Dorothy Demetracopoulou-Lee argued that Greeks placed no value on unlimited change, suggesting they generally wanted to aspire to something that is a certainty, something they can touch and know “ahead of time” (1953:108-109, also Tomazinis 1959, Bratsis 2003:6). Yet throughout the 1950s and 1960s, with increasing urbanization and the availability of mass education (Friedl 1962, 1977), attitudes towards modernization and industrialization significantly changed. Products of technology were embraced in everyday life in urban centers, yet peripheral regions such as Thessaly remained largely untouched by Westernization until after the fall of the military dictatorship in 1974.

Understanding local notions of time are imperative to discussions of modernization in Greece (Collard 1989, Hirschon 2011, Knight 2012a, Stewart 2012). According to Demetracopoulou-Lee (1953:90-92), Greeks traditionally “pass” rather than “keep” time, something which has changed dramatically since Europeanization, consequentially shifting perceptions of temporality. Renée Hirschon (2008, 2011) pinpoints the introduction of a new economic system and new perceptions of time to European integration in the 1980s. She argues that the messy trajectory of Greece to modernity contributes to on-going perceptions of time that can be regarded as “pre-modern” or “non-western” (2011:3-4, see Thompson 1967). Charles Stewart (2012:197) notes that Western historicism is, “but one specific and recently developed principle ... with

¹⁶ See Dimitrios Theodossopoulos (2013) for a discussion of how Greeks are reflexive about economic accountability.

peculiar ideas about linear temporal succession, homogeneous time units ... causation, and anachronism” which should not prejudice against alternative conceptions. In central Greece, time continues to be regarded as cyclical, flexible, and negotiable in some social contexts, while chronological and linear in other arenas (cf. Argyrou 1996). The future is often integrally thought of in terms of the past, highlighting the partial penetration of “western” ideals in Greek society. Modernity in a western sense has not been altogether ‘invasive’, but the capitalist organization of labour has absorbed Greece, peripheralizing it in the occident (Faubion 1993:143, cf. Narotzky 2006). Current energy practice is an example of how the experience of time splits into two heterogeneous dissymmetrical emissions, one toward the future and another toward the past, coexisting wholly within the present (Turetzky 1998:217). This leads to multi-layered perspectives of crisis trajectory and the fragmentation of temporal experience.

The economic crisis has provoked another shift in perceptions of time and temporality. In situations of upheaval and uncertainty people critique historical moments in an attempt to situate themselves within a trajectory (Kirtsoglou 2010:2). Paradoxes of Greek socioeconomic relations that concern the entanglement of “neoliberal” and “traditional” relations are equivalent to paradoxes of time. Understanding time helps one comprehend the experience of modernity in central Greece which is more complex than the westernized concept of “living for the future rather than the past” (Giddens 1998:94, Hirschon 2011:4, also Faubion 1993). History is present on a daily basis and directly informs contemporary socioeconomic relations, parallel to notions of modernity and progress. In some cases, the future is inseparable from the past,

whether in terms of land ownership, hunger, or energy practice. Intermixing, but not necessarily interchangeable, perceptions of time and economics contribute to the complexity of the current social turmoil. Coping with fiscal austerity through employment diversification and changing energy practice is another way of 'getting the job done', of passing through a difficult situation with reference to the past as much as the future¹⁷.

Stavros, 23, is a livestock owner from the Pindos Mountains, who resides in Trikala. In 1997 his mother installed photovoltaic panels on their home and a small portion of their 1,500 stemmata (375 acres) rented land. He claims this was one of the first high-tech solar installations in central Greece. Two years later his mother took a loan to place small wind turbines on another plot of land to provide nearly 100 per cent energy self-sufficiency. This was made possible by extensive research into, and participation in, European Union agricultural and entrepreneurial business schemes. Some of the investment did not prove beneficial as program payments did not materialize or were substantially curtailed, and at times the bureaucracy was impenetrable (cf. Isenhour 2010). Since 2004, as well as tending to his sheep, goats, and cattle, Stavros has sold wood felled from the forest on his land at 130 euros per tonne. Two-thousand-and-twelve was the first year he made a significant profit from this activity and he has since commenced a lucrative trade in illegal logging with three friends, delivering logs felled from mountainsides to customers between 1am and 4am. He says that most people have no real understanding of planning for the future.

¹⁷ Hirschon (2011:5) has argued that this is characteristic of pre-modernity.

They are “happy with what they have got here and now, and cannot be bothered to investigate initiatives for sustainable improvement”. Although Stavros does not have a license to fell, transport and sell the firewood, he is saving up for two second-hand lorries to assist with this business venture. He is a man built on investing in European initiatives and now he is one of the few people making profits during the crisis (cf. Knight 2014).

Understanding localized concepts of time, history, and economy becomes paramount as the crisis continues to unfold with profound impacts on local, national, and European futures. Changes in energy practice highlight how contemporary experiences are complex sociohistorical assemblages with multiple trajectories. Uneven penetration of modernity and an uneasy relationship with European-ness inform local notions of time and economy and in turn affect coping strategies during the crisis, reflected in energy practice.

6. Conclusions

As socioeconomic circumstances radically change in central Greece, raw materials have shifted functionality, helping to realign local livelihoods. Natural resources have always been economic assets, but now they are harnessed in alternative manners, with their “owners” encountering highly paradoxical feelings based on overt historical consciousness. Trees are cut down and used for firewood, agricultural land is transformed to host photovoltaic panels, and solar energy is harnessed for power rather than food production. For locals, transformative energy practice facilitates discussion of the current crisis through issues of history, diversification, modernity, and Europeanization.

Questions remain as to the sustainability of new socio-historical-technical assemblages. The over-use of agricultural land for solar energy production problematizes the future of national food security, and increased deforestation has already had severe environmental impacts. Futuristic photovoltaic technology cuts across existing networks of knowledge and practice, challenging preconceptions of livelihood strategies and economic activity (Strathern 1996). Solar energy offers a new opportunity, but on different social, historical, and material terms. The return to wood-burning energy signifies a challenge to notions of European belonging, modernization, and future economic prosperity. It is symbolic of questions concerning the price of European integration over the course of thirty years. Despite significant problems of air pollution and landslides, wood continues to be wrongly assumed as a 'green sustainable' alternative to expensive petrol heating. However, it clearly represents a mainstream collective movement and a united critique of current socioeconomic circumstances.

Contemporary energy practice is full of paradoxical images, becoming an assemblage that denotes the complexity of current economic anxieties. Investing in forward-looking high-tech energy generation or 'archaic' wood-burning is perceived as a choice between two short-term solutions. The combination of conflicting coping strategies should not be surprising as people prioritize immediate survival over nagging concepts of environmental awareness or neo-colonialism. Thirty years of uninterrupted prosperity have been abruptly ruptured, ejecting people into an ambivalent confused state of belonging. Europe is perceived as both working for the people and against them, generously providing and ruthlessly repossessing in a process void of emotion. Photovoltaic panels

and tzakia are characteristic of different understandings of trajectory and belonging, incorporating past futures that shape “the rhythm and orientation of temporalities” (Bryant 2012, Forthcoming).

The material objects themselves are ensembles of past innovation, present demands, and future trajectories. They trigger intense historical consciousness in local people that relates to land ownership, famine, and pre-modernism, capturing the mutual reflexive conditioning that occurs between objects and subjects (Hirsch and Stewart 2005:262). This is not a linear perspective of historical continuity, but more a folded appreciation of condensed historical moments that mean the objects, through their very presence, offer a critique of the current crisis. The availability of two drastically different energy practices also instigates reflection on the role of Greece in a modern Europe as people understand potential futures as highly uncertain (Stewart 2012:190). Energy practice is but one way actors make sense of their future based on the past in conditions of severe socioeconomic turmoil. This goes some way to highlight the complex understandings of the current crisis that is too often glossed as a matter of mainstream political economy.

References

Appadurai, Arjun. 1990. Disjuncture and Difference in the Global Cultural Economy. *Public Culture*, Volume 2, Number 2, pp: 1-24.

Appadurai, Arjun. 2012. The Spirit of Calculation. *Cambridge Anthropology*, Volume 30, Number 1, pp: 3-17.

Argyrou, Vassos. 1996. *Tradition and Modernity in the Mediterranean: the wedding as symbolic struggle*. Cambridge: Cambridge University Press.

Argyrou, Vassos. 2002. *Anthropology and the Will to Meaning: A Postcolonial Critique*. London: Pluto Press

Aroni-Tsichli, Kaiti. 2005. *Agrotiko Zitima kai Agrotiko Kinima: Thessalia 1881-1923*. Athens: Ekdoseis Papazisi.

Baudelaire, Charles. 1986. *The Painter of Modern Life*. London: Phaidon Press.

Bennett, Jane. 2005. The Agency of Assemblages and the North American Blackout. *Public Culture*, Volume 17, Issue 3, pp: 445-465.

Bennett, Jane. 2010. *Vibrant Matter: a political ecology of things*. Durham: Duke University Press.

Bennison, David. J. 1977. *The Central Place System of the Thessaly Region of Greece*. Unpublished PhD thesis, Durham University.

Berlant, Lauren. 2011. *Cruel Optimism*. Durham: Duke University Press.

Bloch, Maurice. 1998. *How We Think They Think: anthropological approaches to cognition, memory and literacy*. Boulder: Westview Press.

Bouzarovski, Stefan. 2009. East-Central Europe's changing energy landscapes: a place for geography. *Area* Volume 41, pp: 452-463.

Bouzarovski Stefan and Mark Bassin. 2011. Energy and identity: imagining nations through hydrocarbon flows. *Annals of the Association of American Geographers*, Volume 101, pp: 783-794.

Bouzarovski. Stefan., Sarlamanov, Robert, and Saska Petrova. 2011. *The Governance of Energy Poverty in Southeastern Europe*. Brussels: French Institute for International Relations.

Bozhilova, Diana. 2010. When Foreign Direct Investment is Good for Development: Bulgaria's Accession, Industrial Restructuring and Regional FDI. *GreeSE working paper series, Hellenic Observatory, London School of Economics and Political Science, No. 33, pp: 1-44.*

Bratsis, Peter. 2003. Corrupt Compared to What: Greece, capitalist interests, and the specular purity of the State. *GreeSE working paper series, Hellenic Observatory, London School of Economics and Political Science, No. 8, pp: 1-56.*

Bryant, Rebecca. 2010. *The Past in Pieces: belonging in the new Cyprus.* Pennsylvania: University of Pennsylvania Press.

Bryant, Rebecca. 2012. The Fractures of a Struggle: remembering and forgetting Erenköy. In Papadakis, Yannis. and Rebecca Bryant. (eds.). *Cyprus and the Politics of Memory.* London: I.B. Tauris.

Bryant, Rebecca. Forthcoming. History's Reminders: Belonging, Temporality and Unfinished Pasts.

Candea, Matei. 2010. Anonymous Introductions: identity and belonging in Corsica. *Journal of the Royal Anthropological Institute, Volume 16, pp: 119-137.*

Candea, Matei. and Giovanni da Col. 2012. The Return to Hospitality. *Journal of the Royal Anthropological Institute, S1-S19.*

Castells, Manuel. 2000. *The Rise of the Network Society.* Oxford: Blackwell.

Clarke, John. 2008. Living with/in and without neo-liberalism. *Focaal: Journal of Global and Historical Anthropology, Volume 51, Number 1, pp: 135-147.*

Clogg, Richard. 1992. *A Concise History of Greece.* Cambridge: Cambridge University Press.

Collard, Anna. 1989. Investigating "Social Memory" in a Greek Context. In Elizabeth Tonkin, Maryon McDonald, and Malcolm Chapman. (eds.). *History and Ethnicity.* London: Routledge.

Da Col, Giovanni. 2012. The Poisoner and the Parasite: cosmoeconomics, fear, and hospitality among Dechen Tibetans. *Journal of the Royal Anthropological Institute, pp: S175-S195.*

Dalakoglou, Dimitris. 2013. Neo-Nazism and Neoliberalism: a few comments on violence in Athens at the time of crisis. *WorkingUSA, Volume 16, Number 2*, pp: 283-292.

Danforth, Loring., and Riki van Boeschoten. 2012. *Children of the Greek Civil War: Refugees and the Politics of Memory*. Chicago: University of Chicago Press.

Deleuze, Gilles. 1991. *Bergsonism*. New York: Zone.

Deleuze Gilles. 1994. *Difference and Repetition*. London: Athlone.

Demetracopoulou-Lee, Dorothy. 1953. Greece: Cultural Patterns and Technical Change. In Mead, Margaret. (ed.). *Cultural Patterns and Technical Change: a manual prepared by the World Federation for Mental Health*. Paris: UNESCO.

Faubion, James. D. 1993. *Modern Greek Lessons: a primer in historical constructivism*. Princeton: Princeton University Press.

Fontefrancesco, Michele. F. 2012. Crafting the Local: GIs, jewellery, and transformations in Valenza, Italy. *Social Analysis, Volume 56, Number 3*, pp: 89-107.

Friedl, Ernestine. 1962. *Vasilika: a village in modern Greece*. New York: Holt, Rinehart and Winston.

Friedl, Ernestine. 1977. Kinship, Class, and Selective Migration. In Peristiany, J. (ed.). 1977. *Mediterranean Family Structures*. Cambridge: Cambridge University Press.

Geels, Frank. W. 2010. Ontologies, socio-technical transitions (to sustainability), and the multi-level perspective. *Research Policy Volume 39*, pp: 495–510.

Giddens, Anthony. 1981. *A Contemporary Critique of Historical Materialism: Volume 1. Power, Property and the State*. London : Macmillan.

Giddens, Anthony. 1991. *Modernity and Self-Identity: Self and Society in the Late Modern Age*. Cambridge: Polity Press.

Giddens, Anthony. 1998. *The Third Way: the Renewal of Social Democracy*. Oxford: Polity Press.

Gilsenan, Michael. 1996. *Lords of the Lebanese Marches: violence and narrative in an Arab society*. London: I.B. Tauris.

Graeber, David. 2012. On social currencies and human economies: some notes on the violence of equivalence. *Social Anthropology, Special Issue: The Debt Issue, Volume 20, Number 4*, pp: 411-428.

Graham, Stephen. 2000. Introduction: cities and infrastructure networks. *International Journal of Urban and Regional Research, Volume 24*, pp: 114-119.

Grosz, Elizabeth. 1999. *Becomings: Explorations in Time, Memory, and Futures*. London: Cornell University Press.

Gudeman, Stephen. (ed.). 2009. *Economic Persuasions*. Oxford: Berghahn Books.

Harvey, Penny. 2011. Comment – Knowledge Transfer: Exchanging Knowledge with the Field. *Anthropology Matters, Volume 13, Number 1*.

Hatziargyriou, Nikolaos. 2012. The State of Photovoltaic Energy Generation in Greece. PowerPoint Presentation, accessed 30th January 2013.

Herzfeld, Michael. 1986. *Ours Once More: folklore, ideology, and the making of modern Greece*. New York: Pella.

Herzfeld, Michael. 1987. *Anthropology through the Looking-glass: critical ethnography in the margins of Europe*. Cambridge: Cambridge University Press.

Herzfeld, Michael. 2005. *Cultural Intimacy: social poetics in the nation-state (Second Edition)*. London: Routledge.

High, Holly. 2012. Re-reading the Potlatch in a Time of Crisis: Debt and the Distinctions that Matter. *Social Anthropology, Special Issue: The Debt Issue, Volume 20, Number 4*, pp: 363-379.

Hirsch, Eric. and Charles Stewart. 2005. Introduction: Ethnographies of Historicity. *History and Anthropology, Volume 16, Number 3*, pp: 261-274.

Hirschon, Renée. 2008. Presents, Promises and Punctuality: accountability and obligation in Greek social life. In Mazower, M. (ed.). *Networks of Power in Modern Greece: essays in honour of John Campbell*. London: Hurst.

Hirschon, Renée. 2010. Person and Nation: Church, Christian Community, and Spectres of the Secular. In Hann, C. and H. Goltz (eds.). *Eastern Christianities in Anthropological Perspective*. Berkeley: University of California Press.

Hirschon, Renée. 2011. Cultural Mismatches: Greek Concepts of Time, Personal Identity, and Authority in the Context of Europe. *Oxford College of Marketing Working Paper*. Also in Featherstone, K. (ed.). 2013. *Europe in Modern Greek History*. London: Hurst.

Hodges, Matt. 2007. *The Ethnography of Time: living with history in modern rural France*. Lampeter: Edwin Mellen.

Hodges, Matt. 2008. Rethinking Time's Arrow: Bergson, Deleuze and the Anthropology of Time. *Anthropological Theory, Volume 8, Number 4*, pp: 399–429.

Hodges, Matt. 2010. The time of the interval: historicity, modernity, and epoch in rural France. *American Ethnologist, Volume 37, Number 1*, pp:115–131.

Isenhour, Cindy. 2010. Building Sustainable Societies: a Swedish case study on the limits of reflexive modernization. *American Ethnologist, Volume 37, Number 3*, pp: 511-525.

Kapferer, Bruce. 2010. The Aporia of Power: crisis and the emergence of the corporate state. *Social Analysis, Volume 54, Number 1*, pp: 125-151.

Kirtsoglou, Elisabeth. 2010. Introduction: Rhetoric and the Workings of Power – the Social Contract in Crisis. *Social Analysis, Volume 54, Issue 1*, pp: 1–14.

Kirtsoglou, Elisabeth., Theodossopoulos, Dimitrios. and Daniel. M. Knight. 2013. The Dark Ages of the Golden Dawn: anthropological analysis and responsibility in the twilight zone of the Greek crisis. *Journal of the Finnish Anthropological Society, Volume 38, Number 1*.

Klein, Naomi. 2008. *The shock doctrine: The rise of disaster capitalism*. London: Penguin Books.

Knight, Daniel. M. 2012a. Cultural Proximity: Crisis, Time and Social Memory in Central Greece. *History and Anthropology, Volume 23, Issue 3*, pp: 349-374.

Knight, Daniel. M. 2012b. Turn of the Screw: Narratives of History and Economy in the Greek Crisis. *Journal of Mediterranean Studies, Volume 21, Number 1, pp: 53-76.*

Knight, Daniel. M. 2013a. The Greek Economic Crisis as Trope. *Focaal: Journal of Global and Historical Anthropology, Volume 65, Spring 2013, pp: 147-159.*

Knight, Daniel. M. 2013b. Famine, Suicide and Photovoltaics to Famine: Narratives of the Greek Crisis. *GreeSE Working Paper Series, Hellenic Observatory, London School of Economics and Political Science, No. 67, pp: 1-44.*

Knight, Daniel. M. 2014. Opportunism and Diversification: Entrepreneurship and Livelihood Strategies in Uncertain Times. *Ethnos: Journal of Anthropology.*

Knight, Daniel M. and Sandra Bell. 2013. Pandora's Box: Photovoltaic Energy and Economic Crisis in Greece. *American Institute of Physics Journal of Renewable and Sustainable Energy, Number 5, pp: 1-16.*

Knox, Hannah., Savage, Mike., and Penny Harvey. 2006. Social Networks and the Study of relations: networks as method, metaphor and form. *Economy and Society, Volume 35, Number 1, pp: 113-140.*

Latour, Bruno. 1993. *We Have Never Been Modern.* London: Harvester Wheatsheaf.

Latour, Bruno. 2005. *Reassembling the Social: an introduction to actor-network theory.* Oxford: Oxford University Press.

MacDonald, Sharon. (ed.). 1993. *Inside European Identities.* Oxford: Berg.

MacGaffey, Janet. 1998. Creatively Coping with Crisis: entrepreneurs in the second economy of Zaire (the Democratic Republic of the Congo). In McDade, Barbara. E. and Anita Spring (eds.). 1998. *African Entrepreneurship: theory and reality.* Florida: University of Florida Press.

Malaby, Thomas. 2003. The Currency of Proof: Euro competence and the refiguring of value in Greece. *Social Analysis, Volume 47, Number 1, pp: 42-52.*

Mitchell, Jon. 2002. *Ambivalent Europeans: ritual, memory and the public sphere in Malta.* London: Routledge.

Moore, Henrietta. 2004. Global anxieties: Concept-metaphors and pre-theoretical commitments in anthropology. *Anthropology Today, Volume 4, Number 1*, pp: 71-88.

Nader, Laura. 2012. Energy Choices: humanity's role in changing the face of the Earth. Book Review, *Social Analysis, Volume 56, Number 3*, pp: 108-116.

Narotzky, Susana. 2006. Binding Labour and Capital: Moral obligation and forms of regulation in a regional economy. *Etnográfica, Volume 10, Number 2*, pp: 337-354.

Narotzky, Susana. and Gavin Smith. 2006. *Immediate Struggles: people, power, and place in rural Spain*. Berkeley: University of California Press.

Peck, Jamie, and Nik Theodore. 2012. Reanimating neoliberalism: Process geographies of neoliberalisation. *Social Anthropology, Volume 20, Number 2*, pp: 177-185.

Pryce, Vicky. 2012. *Greeconomics: the euro crisis and why politicians don't get it*. London: Biteback Publishing.

Sayer, David. 1991. *Capitalism and Modernity: An excursus on Marx and Weber*. London: Routledge.

Serres, Michel. 1983. *The Parasite*. Baltimore: Johns Hopkins University Press.

Serres, Michel. 1987. *Statues*. Paris: François Bourin.

Serres, Michel. 1995a. *Conversations on Science, Culture, and Time*. Arbor: University of Michigan Press.

Serres, Michel. 1995b. *Genesis*. Ann Arbor: University of Michigan Press.

Shove, Elizabeth. 2003. Converging Conventions of Comfort, Cleanliness and Convenience. *Journal of Consumer Policy, Volume 26*, pp: 395-418.

Shove, Elizabeth. 2009. (ed.). [Time, Consumption and Everyday Life: practice, materiality and culture](#). Oxford: Berg.

Stewart, Charles. 2003. Dreams of Treasure: Temporality, Historicisation, and the Unconscious. *Anthropological Theory, Volume 3, Number 4*, pp: 481-500.

Stewart, Charles. 2012. *Dreaming and Historical Consciousness in Island Greece*. Harvard: Harvard University Press.

Strang, Veronica. 2009. *Gardening the World: agency, identity and the ownership of water*. Oxford: Berghahn.

Strathern, Marilyn. 1996. Cutting the Network. *The Journal of the Royal Anthropological Institute, Volume 2, Number 3, pp: 517-535*.

Sutton, David. 1998. *Memories Cast in Stone: the relevance of the past in everyday life*. Oxford: Berg.

Sutton, David. 2001. *Remembrance of Repasts: an anthropology of food and memory*. Oxford: Berg.

Sutton, David. 2011. Memory as a Sense: a gustemological approach. *Food, Culture, Society, Volume 14, Issue 4, pp: 462-475*.

Theodossopoulos, Dimitrios. 2000. The land people work and the land the ecologists want: indigenous land valorisation in a rural Greek community threatened by conservation law. In Abramson, Allen. and Dimitrios Theodossopoulos. (eds.). *Land, law and environment: mythical land, legal boundaries*. London: Pluto Press.

Theodossopoulos, Dimitrios. 2006. Introduction: The 'Turks' in the Imagination of the 'Greeks'. *South European Society and Politics, Volume 11, Number 1, pp: 1-32*.

Theodossopoulos, Dimitrios. 2013. Infuriated with the Infuriated? Blaming tactics and discontent about the Greek financial crisis. *Current Anthropology, Volume 54, Number 2, pp: 200-221*.

Theodossopoulos, Dimitrios. and Elisabeth Kirtsoglou. (eds.). 2010. *United in Discontent: local responses to cosmopolitanism and globalization*. Oxford: Berghahn Books.

Thompson, Edward. P. 1967. Time, Work-discipline, and Industrial Capitalism. *Past and Present, Volume 38, Number 1, pp: 56-97*.

Tomazinis, Anthony. R. 1959 Recent Trends in the Economy of Greece. *Land Economics, Volume 35, Number 4, pp: 347-355*.

Turetzky, Philip. 1998. *Time*. London: Routledge.

Wacquant, Loïc. 2012. Three steps to a historical anthropology of actually existing neoliberalism. *Social Anthropology, Volume 20, Number 2, pp: 66–79.*

Yalouri, Eleana. 2001. *The Acropolis: global fame, local claim.* Oxford: Berg.

www.bbc.co.uk/news/business

Previous Papers in this Series

Previous Papers in this Series

77. Marangudakis Manussos, Rontos, Kostas and Xenitidou, Maria, [State Crisis and Civil Consciousness in Greece](#), October 2013
76. Vlamis, Prodromos, [Greek Fiscal Crisis and Repercussions for the Property Market](#), September 2013
75. Petralias, Athanassios, Petros, Sotirios and Prodromidis, Pródromos, [Greece in Recession: Economic predictions, mispredictions and policy implications](#), September 2013
74. Katsourides, Yiannos, [Political Parties and Trade Unions in Cyprus](#), September 2013
73. Ifantis, Kostas, [The US and Turkey in the fog of regional uncertainty](#), August 2013
72. Mamatzakis, Emmanuel, [Are there any Animal Spirits behind the Scenes of the Euro-area Sovereign Debt Crisis?](#), July 2013
71. Etienne, Julien, [Controlled negative reciprocity between the state and civil society: the Greek case](#), June 2013
70. Kosmidis, Spyros, [Government Constraints and Economic Voting in Greece](#), May 2013
69. Venieris, Dimitris, [Crisis Social Policy and Social Justice: the case for Greece](#), April 2013
68. Alogoskoufis, George, [Macroeconomics and Politics in the Accumulation of Greece's Debt: An econometric investigation 1974-2009](#), March 2013
67. Knight, Daniel M., [Famine, Suicide and Photovoltaics: Narratives from the Greek crisis](#), February 2013
66. Chrysoloras, Nikos, [Rebuilding Eurozone's Ground Zero - A review of the Greek economic crisis](#), January 2013
65. Exadaktylos, Theofanis and Zahariadis, Nikolaos, [Policy Implementation and Political Trust: Greece in the age of austerity](#), December 2012
64. Chalari, Athanasia, [The Causal Powers of Social Change: the Case of Modern Greek Society](#), November 2012
63. Valinakis, Yannis, [Greece's European Policy Making](#), October 2012

62. **Anagnostopoulos, Achilleas** and **Siebert, Stanley**, [*The impact of Greek labour market regulation on temporary and family employment - Evidence from a new survey*](#), September 2012
61. **Caraveli, Helen** and **Tsionas, Efthymios G.**, [*Economic Restructuring, Crises and the Regions: The Political Economy of Regional Inequalities in Greece*](#), August 2012
60. **Christodoulakis, Nicos**, [*Currency crisis and collapse in interwar Greece: Predicament or Policy Failure?*](#), July 2012
59. **Monokroussos, Platon** and **Thomakos, Dimitrios D.**, [*Can Greece be saved? Current Account, fiscal imbalances and competitiveness*](#), June 2012
58. **Kechagiaras, Yannis**, [*Why did Greece block the Euro-Atlantic integration of the Former Yugoslav Republic of Macedonia? An Analysis of Greek Foreign Policy Behaviour Shifts*](#), May 2012
57. **Ladi, Stella**, [*The Eurozone Crisis and Austerity Politics: A Trigger for Administrative Reform in Greece?*](#), April 2012
56. **Chardas, Anastassios**, [*Multi-level governance and the application of the partnership principle in times of economic crisis in Greece*](#), March 2012
55. **Skouroliakou, Melina**, [*The Communication Factor in Greek Foreign Policy: An Analysis*](#), February 2012
54. **Alogoskoufis, George**, [*Greece's Sovereign Debt Crisis: Retrospect and Prospect*](#), January 2012
53. **Prasopoulou, Elpida**, [*In quest for accountability in Greek public administration: The case of the Taxation Information System \(TAXIS\)*](#), December 2011
52. **Voskeritsian, Horen** and **Kornelakis, Andreas**, [*Institutional Change in Greek Industrial Relations in an Era of Fiscal Crisis*](#), November 2011
51. **Heraclides, Alexis**, [*The Essence of the Greek-Turkish Rivalry: National Narrative and Identity*](#), October 2011
50. **Christodoulaki, Olga**; **Cho, Haeran**; **Fryzlewicz, Piotr**, [*A Reflection of History: Fluctuations in Greek Sovereign Risk between 1914 and 1929*](#), September 2011
49. **Monastiriotes, Vassilis** and **Psycharis, Yiannis**, [*Without purpose and strategy? A spatio-functional analysis of the regional allocation of public investment in Greece*](#), August 2011

SPECIAL ISSUE edited by **Vassilis Monastiriotes**, [*The Greek crisis in focus:*](#)

[*Austerity, Recession and paths to Recovery*](#), July 2011

48. Kaplanoglou, Georgia and Rapanos, Vassilis T., [*The Greek Fiscal Crisis and the Role of Fiscal Government*](#), June 2011
47. Skouras, Spyros and Christodoulakis, Nicos, [*Electoral Misgovernance Cycles: Evidence from wildfires and tax evasion in Greece and elsewhere*](#), May 2011
46. Pagoulatos, George and Zahariadis, Nikolaos, [*Politics, Labor, Regulation, and Performance: Lessons from the Privatization of OTE*](#), April 2011
45. Lyrintzis, Christos, [*Greek Politics in the Era of Economic Crisis: Reassessing Causes and Effects*](#), March 2011
44. Monastiriotis, Vassilis and Jordaan, Jacob A., [*Regional Distribution and Spatial Impact of FDI in Greece: evidence from firm-level data*](#), February 2011
43. Apergis, Nicholas, [*Characteristics of inflation in Greece: mean spillover effects among CPI components*](#), January 2011
42. Kazamias, George, [*From Pragmatism to Idealism to Failure: Britain in the Cyprus crisis of 1974*](#), December 2010
41. Dimas, Christos, [*Privatization in the name of 'Europe'. Analyzing the telecoms privatization in Greece from a 'discursive institutionalist' perspective*](#), November 2010
40. Katsikas, Elias and Panagiotidis, Theodore, [*Student Status and Academic Performance: an approach of the quality determinants of university studies in Greece*](#), October 2010
39. Karagiannis, Stelios, Panagopoulos, Yannis, and Vlamis, Prodromos, [*Symmetric or Asymmetric Interest Rate Adjustments? Evidence from Greece, Bulgaria and Slovenia*](#), September 2010
38. Pelagidis, Theodore, [*The Greek Paradox of Falling Competitiveness and Weak Institutions in a High GDP Growth Rate Context \(1995-2008\)*](#), August 2010
37. Vraniali, Efi, [*Rethinking Public Financial Management and Budgeting in Greece: time to reboot?*](#), July 2010
36. Lyberaki, Antigone, [*The Record of Gender Policies in Greece 1980-2010: legal form and economic substance*](#), June 2010
35. Markova, Eugenia, [*Effects of Migration on Sending Countries: lessons from Bulgaria*](#), May 2010

34. **Tinios, Platon**, [*Vacillations around a Pension Reform Trajectory: time for a change?*](#), April 2010
33. **Bozhilova, Diana**, [*When Foreign Direct Investment is Good for Development: Bulgaria's accession, industrial restructuring and regional FDI*](#), March 2010
32. **Karamessini, Maria**, [*Transition Strategies and Labour Market Integration of Greek University Graduates*](#), February 2010
31. **Matsaganis, Manos** and **Flevotomou, Maria**, [*Distributional implications of tax evasion in Greece*](#), January 2010
30. **Hugh-Jones, David**, **Katsanidou, Alexia** and **Riener, Gerhard**, [*Political Discrimination in the Aftermath of Violence: the case of the Greek riots*](#), December 2009
29. **Monastiriotis, Vassilis** and **Petrakos, George**, [*Local sustainable development and spatial cohesion in the post-transition Balkans: policy issues and some theory*](#), November 2009
28. **Monastiriotis, Vassilis** and **Antoniades, Andreas**, [*Reform That! Greece's failing reform technology: beyond 'vested interests' and 'political exchange'*](#), October 2009
27. **Chrysochoou, Dimitris**, [*Making Citizenship Education Work: European and Greek perspectives*](#), September 2009
26. **Christopoulou, Rebekka** and **Kosma, Theodora**, [*Skills and Wage Inequality in Greece: Evidence from Matched Employer-Employee Data, 1995-2002*](#), May 2009

Online papers from the Hellenic Observatory

All GreeSE Papers are freely available for download at <http://www2.lse.ac.uk/europeanInstitute/research/hellenicObservatory/pubs/GreeSE.aspx>

Papers from past series published by the Hellenic Observatory are available at http://www.lse.ac.uk/collections/hellenicObservatory/pubs/DP_oldseries.htm