Devising classificatory frameworks of accountings' consequences: An illustrative Pacific study of the economic, social, cultural and natural¹ Keith Dixon^{a,*}, Michael Gaffikin^b

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Abstract

Purpose: Applications of accounting ideas and practices invariably have consequences. The people in any way responsible for these applications cannot know all possible consequences; however, this predicament is yet more reason to anticipate as many as possible, and behave accordingly. Our article responds to arguments that in order to increase the impact of research into accounting ideas and practices, researchers should give greater priority than hitherto to knowing about the consequences of accountings.

Method: We deal with the concept of consequences and exemplify how appreciating them is an interpretative process. We illustrate this process through studying an identity longitudinally, taking an eclectic approach and making liberal use of theoretical perspectives. Our empirical materials are from Nikunau Island and where *I-Nikunau* (i.e., indigenes of Nikunau) Diaspora reside—Tarawa Atoll, and other Pacific locations and Great Britain—along with further places where accounting usages affecting them have emanated (e.g., Rome, Washington and Manila). These usages relate to industrial hunting of marine life, trading for copra, mining for fertiliser, religion making, civilising and developing the people through colonial governance, and developing and emerging their economy with aid from neo-imperial organisations.

Findings: We argue that accounting usages have caused or possibilitated wide-ranging and far-reaching alterations to life among *I-Nikunau*, including that the majority now lives outside Nikunau. These alterations may be regarded as consequences of accounting usages, albeit in conjunction with those of many other actions, events, etc. Having drawn terms from a range of disciplines, we classify the consequences as macro- and micro-economic, distributional, organisational, political, social, environmental, societal, cultural, educational, geographical, demographical, spiritual, nutritional and biological, and we present these 15 classes in a framework specific to *I-Nikunau*.

Originality: We commend our approach to other researchers of accounting and other disciplines in order to induce equivalent classificatory frameworks relevant to their identities of study. We also put forward a canoe metaphor to help shape researchers' endeavours and qualify a definition of accounting to help users of accounting technology to have greater consideration for accountings' consequences.

Keywords Pacific studies; Human change; Diaspora; Indigenous agency; Critical; Emancipation.

1 Introduction

Our article responds to the potential for research to elaborate consequences associated with habitual human applications of accounting practices (hereafter, "accounting usages"). Understanding accountings as they function or operate in organisations, economies and societies is supremely relevant and important: so too is deliberating and knowing more about the consequences of these accountings in particular contexts for given identities, as per calls in several studies for research into such matters (e.g., Burchell, Clubb, Hopwood, Hughes & Nahapiet, 1980; Davis, Menon & Morgan, 1982; Roslender & Dillard, 2003; Vollmer, 2004). These calls have not gone unheeded (e.g., see Ahrens & Chapman, 2007; Bakre, 2008; Hopwood, 2009; Jones, 2010; Low et al., 2008; Modell, 2014; Neu & Graham, 2006; Preston, 2006; Stalebrink & Sacco, 2007; Uddin & Choudhury, 2008; Walker, 2003). Nevertheless, the issue of unearthing, articulating and classifying such consequences has been addressed only partially, focusing largely on economic and behavioural consequences for identities near at hand (e.g., see Arnold, 1991; Ashton, 1976; Bandury & Nahapiet, 1979; Bougen, 1989; Crawley, 2015; Holthausen & Leftwich, 1983; Luckett & Eggleton, 1991; Ridgway, 1956; Zeff, 1978). This is despite a profusion of studies that deal, at least implicitly and perhaps sketchily or overly unambiguously, with consequences flowing from issues the studies in question are examining.

Our response comprises methods for, among other things, devising classificatory frameworks for delving into the meanings of the consequences in question. For a given identity, we conceive a consequence as comprising a state or continuing circumstance arising for the identity that is different from what might have been without the accounting usage or with an alternative usage or form of usage. Our approach is grounded on notions of accountings having consequences that are socio-political and cultural, as well as economic and organisational (Hines, 1989; Hopwood, 2008a, 2008b McSweeney, 2009; Sikka, Willmott & Puxty, 1995). Indeed, we recognise that consequences stemming from accountings per se are outnumbered and exceeded in importance by consequences arising from the organisational structures and processes from which accounting systems, calculations and similar "technical paraphernalia" derive meanings and significances (Asdal, 2011; Bougen, 1989; Burchell et al., 1980; Pettigrew, 1974/2014). Concomitantly, our approach is grounded on knowledge of consequences crossing philosophical perspectives (Kezar, 2005; Modell, 2014; Roslender & Dillard, 2003). In this respect, our purpose is to complement Vollmer's (2003, 2004) research agenda, by generating and informing discussion about consequences as a concept. To better comprehend consequences, researchers and practitioners should voyage beyond the horizon of both the fields into which they are prepared to inquire and the meanings or interpretations they are prepared to bestow on their results.

To exemplify our response, we report an application of our methods and framework to an identity comprising the indigenes of Nikunau Island¹ (hereafter *I-Nikunau*²) and their Diasporic communities elsewhere. The choice of identity arises in part from the senior investigator having been a member by affinity for over 30 years, including staying on Nikunau, and being part of communities on Tarawa Atoll,³ New Zealand's two main islands and Great Britain. Over and above that, it brings out consequences arising from or possibilitated by accounting usages during the past two centuries. The accounting usages in question are offshoots of those associated with the entire Gilbert Islands or Kiribati, as articulated and criticised by Dixon and Gaffikin (2014). As far as Nikunau itself is concerned, the usages have been deployed in loco and from a distance in a situation of David and Goliath proportions—a small number of meek persons, living on a remote, drought-prone atoll pitted against the British Empire, supranational organisations and industrialised economies (cf.

Secretariat of the Pacific Regional Environment Program, 2015). Many *I-Nikunau* in their diasporic communities have been in similarly disadvantaged circumstances.

Our article should be of interest to two broad audiences. We expect to contribute to the international accounting literature by providing widely applicable means to facilitate discovery and dissemination of knowledge about consequences, and to increase the esteem of holding such knowledge; we illustrate this potential by discussing how these contributions are potentially important to the accounting academic and professional community at large from the perspective of learning. We also expect to contribute to accounting, Pacific and other literatures concerned with social justice and making accounting more emancipatory (Macintosh, 2009; Roslender & Dillard, 2003); however, we try to steer the difficult passage between being culturally sensitive and empathetic, with the aim to reveal positive and negative outcomes for the community being studied, and stimulating counter-movements to repression (Davie, 2000; Lal, 2007; Macdonald, 1996b; McNicholas & Barrett, 2005).

In Section 2 (hereafter S2, etc.), we review literature about consequences, outlining how that shaped our approach and method. In S3, we relate details of the study identity and domain of inquiry, our participant-observations and other matters of method. This includes outlining how we analysed our empirical materials into a thick, socio-historical, analytic description about *I-Nikunau*. In S4, we advance a classificatory framework that is specific to *I-Nikunau* but whose form and method of construction, we argue, are relevant for exploring consequences caused or possibilitated by accounting usages in many other spheres. S5 comprises closing arguments and other conclusions.

An obvious criticism of this article is its length. The framework included in S4 comprises 15 classes of knowledge-type consequences (e.g., distributional, demographical). In order to explain and exemplify each of these, we subdivide S4 into S4.1 to S4.15, and these, including the many references cited therein from outside the accounting literature, take up more than half the article. However, the contents of these subsections are the most controversial and fundamental to our contributions to knowledge. The devil of consequences is often in the detail; juxtaposing this detail and synthesising enables an appreciation of not only how wideranging and longitudinal consequences of accounting usages can be (cf. Davis et al., 1982), but also how they are interrelated and that domino effects invariably arise. This treatment demonstrates how the primary questions are complicated by accounting usages being embedded in many aspects of human activities, organisations and societies; indeed, it adds to and clarifies how accounting has permeated these aspects (cf. Burchell et al., 1980).

2 Consequences

The diverse appearance of the concept of consequences in the accounting literature is a development since the 1980s. Before, most coverage was limited to (neo-classical, micro) "economic" (e.g., see Holthausen & Leftwich, 1983) and "behavioural" varieties (e.g., see review by Luckett & Eggleton, 1991), which was consistent with the economic reductionism in contemporary accounting research, with which Burchell et al. (1980) and Hines (1989) took issue. Even so, there were exceptions; as they reflect many of the matters arising in subsequent work, we recite them in introducing the subsections below.

Zeff (1978) raises social, (macro) economic and distributional consequences as substantive issues in the then fledgling industry of accounting standard setting. Bougen (1989) shows that managers adopted an accounting system intended to bring about less volatility and fewer conflicts with workers, whereas it had an opposite result, involving complex disagreements and challenges from the workers. Bandury and Nahapiet (1979) reflect on the consequences that new computer-related accounting systems and control technology were having for the

behaviour of organisational participants and for organisational forms. In tentatively advancing a heuristic framework, they recognise consequences being many and varied, spatially and temporally; for example, within the organisation, organisational styles and policies that although removed from new systems were impacted by them nevertheless, and the systems affected individuals, groups and a society in general outside the organisation.

However, as we state in S1 to justify our article, a thorough theoretical treatment of consequences is absent from the above and subsequent studies. Indeed, our search in social disciplines for discussion of consequences as a concept was not very fruitful, although we found discussions of one type of consequence or another (e.g., biological consequences, societal consequences), as cited in S4.1 to S4.15. Such was the predicament of Kezar (2005) when investigating the consequences of radical changes to university governance. In S2.1, we review her ideas, alongside Hopper and Powell's (1985) still valid work on paradigms of accounting research. In S2.2, we discuss the nature of consequences; and, in S2.3, we consider how to anticipate and evaluate them.

2.1 Theorising Consequences

Having undertaken a literature review of four types of theories that address or describe radical change in organisations, Kezar (2005) induces a taxonomy of consequences corresponding to theory types, as follows:

- efficiency, effectiveness and quality (teleological theories)
- new ideology, reconciliation of views or interests, change in power and interests of particular groups being better served (political theories)
- new interpretative schema, underlying values and assumptions (institutional theories)
- values and symbols being aligned, disturbed and realigned with structures and processes (cultural theories, including local theories (Alam, Lawrence & Nandan, 2004), and theories of diaspora (Shuval, 2000), colonialism, cultural imperialism and globalisation (Bakre, 2004; Horvath, 1972)).

Kezar then classifies studies about consequences of radical change projects by paradigm. She finds that these consequences are conceived narrowly, being limited to direct and intentional outcomes, and so the knowledge published can mostly be classed as formistic or mechanistic within Pepper's (1942) taxonomy, in contrast to contextualistic and organic.

Kezar's (2005) four-paradigm division approximates one used by Hopper and Powell (1985) to classify accounting studies published up to the early 1980s. Although they found studies that were consistent with each of the paradigms, the functional paradigm, corresponding with the first in the above list, was preponderant. Our observations are that the proliferation of studies since follows a similar pattern; however, the proportion of studies associated with the last three have probably all increased, partly through the influence of Burchell et al. (1980) and the emergence of critical journals. Thus, we draw confidently on Kezar's ideas to study the consequences of accounting for individuals, groups and societies, particularly when the study identity is other than the people who perform the accounting usages and the organisations with which they are affiliated.

Indeed, we realised quickly that studying consequences involves matters of ideology, values and symbols, and so extends through all four paradigms, including cultural theories, notably cultural imperialism. This observation applies because of how *I-Nikunau* have been increasingly enmeshed since the 1820s in what is sometimes simplified as a colonial "project", and how various accounting usages have accompanied this project (Dixon & Gaffikin, 2014). Some of these usages have occurred on Nikunau or where *I-Nikunau* diasporic communities have resided, but others have been at a distance (e.g., Sydney, London, Rome, Melbourne, Washington, Manila). With reference to various political,

institutional, cultural and even teleological perspectives, we link these usages with the radical changes that occurred to all aspects of the lives of the last eight generations of *I-Nikunau*, including the emergence of a Diaspora (e.g., see Batiri et al., 1985; Geddes, Chambers, Sewell, Lawrence & Watters, 1982; Macdonald, 1982a). However, being uneasy about such eclecticism (cf. Chua, 1988), we reconsidered how the four paradigms are related.

Hopper and Powell's (1985) work relies on Burrell and Morgan (1979). The latter distinguish the four paradigms according to researchers vying for either *conservatism* or *radicalism*, and taking either an *objectivist stance* or a *subjectivist stance*; they illustrate the result in diagrams comprising contiguous quadrants, one for each paradigm. Burrell and Morgan's work has attracted much critical attention, in which the main concerns derive from how the paradigms are shown as occupying separate territories (see Burrell, 1999). Having considered how this source of criticism could be overcome in conjunction with the notion of a research approach that embraces the possibility expressed above as "through all four paradigms, including cultural theories", we drafted an alternative diagram of the relative positioning of the paradigms (see Figure 1). Although our diagram retains the well-established but disputed objectivist—subjectivist dichotomy in research methods (see Gaffikin, 2010; Irvine & Gaffikin, 2006), it subsumes the possibility of all theories being "cultural". Thus, each paradigm occupies some of the same territory as the other three; and all fit within, or are embraced by, the territory occupied by cultural theories.

Although profound, and contestable, our alternative, but not necessarily always better, diagram is consistent with the way researchers often perceive each inner paradigm as having a boundary and even treat the boundaries as enclosure-walls. This behaviour prevents or deters them from making observations consistent with theories on the other side of the wall from their chosen or accustomed position; it stifles broader visions of the objects of their research and discourages grappling with the significances of context (e.g., for criticism of the disregard of context in accounting research, see McSweeney, 2009); and it restricts their choices of method (and conversely they perceive their preference for particular methods as restricting their paradigm of activity or purpose – see Richardson, 2015) (cf. Carnegie & Napier, 2002; Parker, Guthrie & Gray, 1998; Raffournier & Schatt, 2010). As noted in speaking above of the functional paradigm preponderating, such conformance persists despite researchers receiving encouragement to traverse the walls in question and to appreciate the subjectivist nature of social research (e.g., see Gaffikin, 2010; Roslender & Dillard, 2003; Wilkinson & Durden, 2014). Thus, most accounting research deals with financial accounting and related orthodox practices in ways that reinforce the notion of a concrete, coherent economic world (and society) (Alagiah, 2004; Hines, 1989). While those who look at consequences seem not to have been so very narrow, many studies are confined to or remark only about consequences for an organisation, individuals within it and financially interested parties (e.g., investors and creditors) (e.g., see Humphrey, 1994; Stalebrink & Sacco, 2007). Vollmer (2003) notes this narrow outcome even in relation to Foucauldian studies of accounting.

Wanting and needing to conduct our study in a broader way, we replaced the enclosure-walls metaphor with a version of the canoe metaphor more often found in *I-Nikunau* culture and in Pacific Studies (e.g., see Teaiwa, 2011). The question then arises of how near or far researchers should voyage beyond the horizon both in the expanse of ocean (≡ field in qualitative study) into which they are prepared to inquire and in how they treat their catch (≡ the meanings or interpretations they are prepared to bestow on their results). This led us to draw on Boyce (2004): concerned with broadening learning and teaching, he provides a way to picture broad possibilities, including a diagram of "Many tangents to travel: a broader, tangential view of a business entity's system and its environment" (p. 574). This diagram

contains over 25 example elements, including social dislocation, gender issues, deskilling and globalisation; each example might be affected by accounting even though it is "outside" an organisation. As well as envisaging many of the examples as avenues for deriving contextualistic or organic knowledge through interpretation, they caused us to reflect on how we thought about consequences (see S2.2).

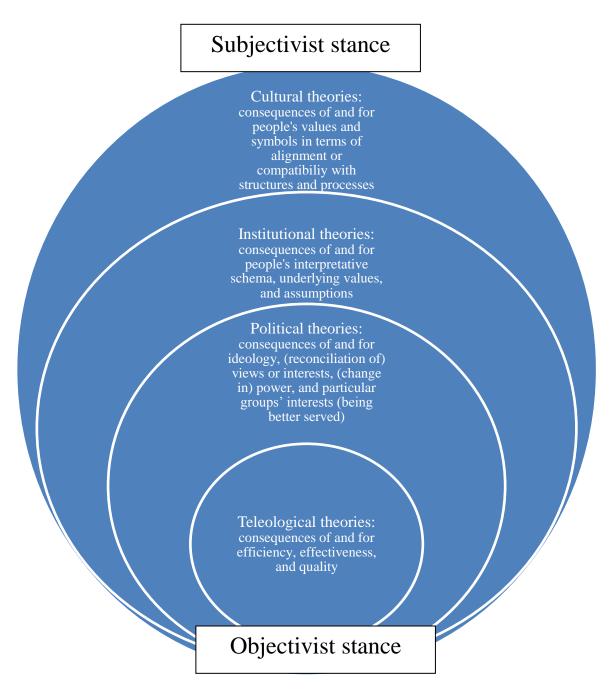


Figure 1. Theories and nature of consequences classified by sociological paradigms. Devised and reformulated from Kezar (2005), Burrell and Morgan (1979), and Hopper and Powell (1985).

Our use of the canoe metaphor illustrates an important aspect of our approach. Although the classification of theories adapted in Figure 1 is European in origin, and based largely on "grander", Eurocentric theories, we use it tenuously, in keeping with the arguments of Alam et al. (2004) that localised, cultural theories can better illuminate postcolonial situations and their accounting elements than grander alternatives can. This is consistent also with relationships between empirical materials like ours and societal theory being somewhat tenuous (see Irvine & Deo, 2006), and deriving from the values of the researchers anyway (see also Bakre, 2004; Davis et al., 1982; Silverman & Gubrium, 1989; Turner, 1989).

2.2 Nature of Consequences

Other aspects of Kezar's (2005) review are relevant to the present article. Blending her ideas with ones drawn from accounting studies, we take the reference point for a consequence to be altered circumstances or altered trends in circumstances. Said alterations might:

- be attributed to or have associations with a single occurrence, event, action or practice, or a continuing sequence or routine of the same occurrences, events, actions or practices
- relate to a variety of physical objects, abstract social constructions and living beings
- differ among this variety
- materialise straightaway or eventually
- not have resulted otherwise.

The distinction above between "attribution" and "association" epitomises a major dichotomy between the paradigms that inform our inquiry. Thus, from one side of the dichotomy, a consequence for social actors and groups arises somehow from structures, processes, actions, conditions, habits, events, etc. that might be interpreted as causal; while, on the other side, the notion of "conditions of possibility" is invoked (cf. Fleischman, Hoskin & Macve, 1995; Miller & O'Leary, 1990), with said structures, etc. being *possibilitative*. This dichotomy is reflected in Figure 1 in how the descriptions of the natures of the consequences differ among the four paradigms. Varying also is the relationship between the occurrence, event, action or practice and the altered circumstances, depending on the objectivity-subjectivity stance of either the particular theory or the paradigm.

To apply the above dichotomy to consequences of accounting, we substituted "accounting usages" for the more general "occurrence(s), event(s), action(s) or practice(s)". This approach is demonstrated in the following statements, which are representative of each side of objectivist—subjectivist dichotomy. The statements indicate from each stance how accounting usages connect to consequences, and are accompanied by examples of why knowledge of consequences is important from that side of the dichotomy.

Teleological and Political Theories

There is a cause and effect relationship between the accounting usage and its consequences, no matter how complex, isometric or knowable

Example: To know about consequences is to understand the wherewithal of actions and the capabilities of analytical schemes of which they are the results.

Institutional and Cultural Theories
Conditions of possibility arise from the accounting usage, out of which arise

new circumstances

Example: To know about consequences makes it possible to criticise actions, along with the theories, beliefs and values on which the actions are founded.

In keeping with being inclusive in our approach, we searched for consequences by:

- recognising changed situations or circumstances of the identity being studied
- distinguishing accounting usages and the accounting entities with which the usages were associated

• linking, if appropriate, the changed situation or circumstances and the usages, no matter whether the links between usages and changes were causal or possibilitative.

Being informed by the literature, we anticipated the consequences being many and varied, including having an impact over varying periods (e.g., see Bandury & Nahapiet, 1979). Indeed, a considerable difficulty is that so many past, present and future things, or indeed everything, might be related, as epitomised in the so-called Butterfly Effect (see Cooper, Crowther & Carter, 2001). We adopted the following tenets:

- Consequences can be regarded as direct or indirect, such as arise from the mixing of occurrences, events, actions or practices (Boyce, 2004).
- Each consequence might be significant in its own right or incidental (i.e., accompanying (an)other, more significant consequences), and even be multiple, as well as conflicting (Hopwood, 1984).
- The consequences can be knock-on, including giving rise to a chain reaction or domino effect, and so be far-reaching (e.g., see Miller & O'Leary, 1990).
- Indirectness arises from some links in such chains of consequences having an accounting essence, and so gives rise to consequences that are partly attributable to or associated with accounting (Shapiro, 1998): hence, the consequences (of non-accounting) of consequences (of accounting).
- Occurrences, events, actions and practices can prompt responses, resistances or opposing actions (Hopwood, 1984), which are themselves consequences; and they affect other consequences, for example, changing their speed, direction and size.
- Long-term consequences of some usages may still be emerging, in real time or because of changes in knowledge or interpretation of history.

As we worked with our empirical materials, our expectation of a large number of consequences came to fruition, and so we began classifying them. We considered the accounting research cited in S1 and the introduction to S2, and chose to follow those who had used what we call knowledge-type classes, such as political (Jones, 2010), organisational (Arnold, 1991), cultural (Walker, 2003), macroeconomic and microeconomic (Crawley, 2015). We encountered other labels in this literature; however, they were concerned with evaluating the consequences in various ways, as explained in S2.3.

2.3 Anticipating and Evaluating Consequences

We claim in S1 that one reason for studying consequences is to improve means of anticipating them. The importance of this potential outcome is evident in various studies that refer to consequences as intended, anticipated and expected, or the opposite (e.g., Ahrens & Chapman, 2007; Alam et al., 2004; Ashton, 1976; Hofstede, 1981; Hopwood, 1984, 2009; Humphrey, 1994; Lapsley & Pettigrew, 1994; Neu & Graham, 2006; Ridgway, 1956; Uddin & Choudhury, 2008). Those that are unintended, unforeseen or unarticulated are more often of a negative nature; and, in any case, there can be issues with who in particular did not intend, foresee or articulate them (Burchell et al., 1980). Our point is that anticipating and articulating such negative consequences might mean their occurrence reduces, their impact is absorbed and better alternative courses of action are taken.

Describing consequences as negative reflects most researchers ascribing an opinion about the consequences they record. Positive connotations are possible (e.g., beneficial, fortuitous, profitable), as are neutral ones (e.g., harmless, innocuous, inconsequential). However, negative connotations are the most prevalent in the literature; they include adverse, serious and unfortunate (e.g., Hines, 1992), brutal (e.g., Preston, 2006), deleterious, dire and disastrous (e.g., Shapiro, 1998), destructive (e.g., Walker 2003), dysfunctional (e.g., Ashton,

1976; Humphrey, 1994; Luckett & Eggleton, 1991; Ridgway, 1956), genocidal (e.g., Neu, 2000), ideological (Bakre, 2008) and stigmatising (e.g., Walker, 2008). We considered whether this prevalence may derive from how the word "consequences" is used in phrases referring to unpleasant results, penalties and costs, as in "face the consequences" and "take the consequences", and that perhaps alternative terms are used instead of "positive consequences". However, from the literature we read, we doubt if this effect is significant; most research that covers consequences explicitly is based on critical theory.

The ascribing of "negative" or "positive" to consequences has surfaced considerations in the literature about ambiguity. The issue is whether a consequence can be classed as positive for a group of people because they are better off than would be the case otherwise, or whether some other standard should apply. Kezar (2005) exemplifies this as follows: data about some of her subjects were interpreted as consequences that were negative. However, she then found that these subjects were already in problematic or otherwise negative circumstances, and revised her initial interpretation because the consequences in question meant the subjects were now better off than previously. One such standard involves researchers identifying those people affected in similar ways by a set of activities or events, and contrasting the consequences for them with consequences for those people affected by the set in opposite ways (e.g., see Bakre, 2008; Hines, 1992; Neu & Heincke, 2004; Preston, 2006). Researchers then leave it to others to ascribe evaluations of positive and negative.

A corollary of the Kezar example just outlined is relevant to this study as follows. In cases of all groups seemingly deriving favourable consequences from a set of activities or events, the distribution of benefits may be disproportionate. This outcome might be perceived as unfair, unjust or repressive, and be interpreted as a negative consequence for the group(s) benefitting least. Referring particularly to critical studies intended to stimulate counter-movements to repression, McNicholas and Barrett (2005) find fault with this interpretation of such outcomes. We have taken their argument on board our canoe, hence our aim to reveal positive and negative outcomes for our identity, with the prospect of negative outcomes being addressed and ameliorated or eliminated in actual political and social conditions applyingour hope is that *I-Nikunau* and similar repressed groups are emancipated. Macdonald (1996b) indicates a similar divergence in the Pacific Studies literature. Often, external researchers seem concerned about indigenous peoples and their lands being a past and present victim of exploitation, while indigenous researchers have incorporated so-called islander agency (see Lal, 2007) as a central theme in culture contact studies. We have taken care to be appreciative of this pitfall; however, we also appreciate that the external-indigenous researcher dichotomy is not straightforward (see Davie, 2000).

3 Method

We came to understand that a key condition for grasping the consequences of accounting is to appreciate the broad roles accounting, including its transactional, distributive and ideological roles. Furthermore, the actions entailed in its practice (e.g., collecting data, keeping books, performing calculative practices and conveying specifications, meanings and similar, and extending to financing relations and incentive schemes – see Dixon & Gaffikin, 2014, p. 687) give rise or possibilitate consequences through the relations of which they are part (cf. McGoun, Bettner & Coyne, 2007), and so it is these relations one must examine in order to surface these consequences (Asdal, 2011).

The consequences we were interested in, and so the relations we examined, concerned the sub-national identity of *I-Nikunau* and their Diaspora; the latter comprises communities who still identify with Nikunau, which is despite many of their members never having set foot on the island.⁴ Studying this identity was possibilitated by the senior investigator being a

member of an extended family type known as *te utu* (see Goodenough, 1955; Lundsgaarde & Silverman, 1972); this membership was by affinity (rather than consanguinity) and dates from 1984. The particular family, hereafter "*Te Utu* of Study", is indigenous to Nikunau, although now its members also live in several of the diasporic communities comprising the study identity; the senior investigator has lived in or visited most of these.

As Dixon and Gaffikin (2014) show, accounting usages have been significant in hegemonic relations that *I-Nikunau* and their island have had with the outside world through a history encompassing "exploration", "discovery", "trading", "evangelizing", "colonisation", "independence" and "aiding", as seen from a Eurocentric perspective (see Routledge, 1985). The accounting usages occurred at a distance and then on Nikunau. They accompanied the deployment of capital and made good the activities of *I-Matang* (i.e., fair-skinned indigenes of Europe), Chinese and other foreign persons, and their various organisations, as enumerated below. Noteworthy is that these usages and the roles they played, familiarly and unobtrusively, seem to have been accepted uncritically by *I-Kiribati*, let alone *I-Nikunau*, certainly before 1979, and even since, when constitutionally Kiribati has been an independent sovereign state (cf. Suzuki, 2003).

I-Nikunau interactions with foreign persons have been continuous for the past eight generations of *Te Utu* of Study (i.e., the 190+ years⁵ since the 1820s). They began with the temporary presence on and around Nikunau of whalers, beachcombers, castaways and itinerant traders (1820-70), and from *I-Nikunau* working on ships and in places around the Pacific (Bedford, Macdonald & Munro, 1980; Maude, 1964; Maude & Doran, 1966; Maude & Leeson, 1965). Subsequently, foreign traders resided on Nikunau (1870-1935); and its six *mwaneaba* districts⁶ were fused into governmental schemes associated with the London Missionary Society (1880–1918), the Government of the United Kingdom of Great Britain and Ireland (1886–1979) and the Government of the Republic of Kiribati (1979–). The *I-Nikunau* Diaspora has emerged since the 1930s and diasporic communities now exist on Tarawa, some Line Islands (lat. 6°N–11°S, long. 150°–162°W), other Pacific islands (notably the Solomon Islands, New Zealand and Australia), and in Great Britain.

The account of methodological considerations and methods in Dixon and Gaffikin (2014, pp. 685-687) applies to this article. Additional empirical materials comprise reference sources about Nikunau, *I-Nikunau* and their Diaspora, dating between Officer on Board the Said Ship (1767, especially pp. 135-138⁷) and Roman (2014), and lengthy participant observations by the senior investigator in the diasporic communities on Te Ika-a-Māui, Te Waipounamu and Great Britain, and stays with communities in Port Moresby and Honiara, and on Nauru. The empirical materials were woven into a rich, chronological, socio-historical, analytic description of the physical and social conditions of *I-Nikunau*, spatially and temporally (cf. Carnegie & Napier, 2002; Pentland, 1999).

Composing the description involved multiple iterations of analysis, giving rise to an increasingly richer narrative, mainly covering the period since 1820. Chronological order was important because of our concern with consequences and their temporal interconnections; consequences are contemporaneous with or subsequent to the occurrences, events, actions or practices that cause or possibilitate them. The narrative was shaped using primary and secondary themes that, at least in our minds, emerged from our analysis (cf. Patton, 1990). The primary themes reflect how we attended to various constancies of and alterations to conditions, circumstances and similar matters, whether economic, social, political, cultural or natural (see Figure 2); they reflect our wholistic (or multidisciplinary) outlook and approach. However, we must caution that we derived these themes as outsiders; barely any equivalent

ideas feature in *te taetae ni Kiribati*. Similar applies to our secondary themes, which are in effect the classes of consequences we report in S4.

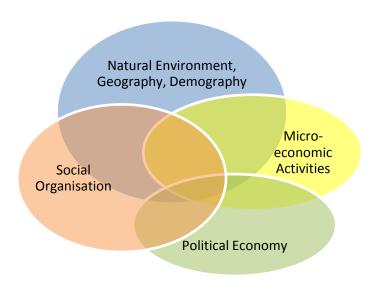


Figure 2. Primary categories of the analytic description

In the narrative, we described people and the local transactions and similar relations among them, and explained how various accounting usages figured in these relations, including who engaged in these usages, and what the deeper and wider contexts of the usages were. The usages were mostly unobtrusive, mundane and taken-for-granted, but important nevertheless, given we were performing social research (cf. Robillard, 1992; Schuetz, 1951). In moving from analytic descriptions to interpretations, we made connections among, and otherwise synthesised, the contents of the narrative, as reflected in the contents of S4.1 to S4.15. As elaborated in S4, these subsections flow from presenting the classificatory framework specific to *I-Nikunau* and the consequences accounting usages have had for them. In presenting that particular framework, we reveal more about the idea of using classificatory frameworks to identify the consequences of accounting usages and to delve into their meanings.

The question arises of why study *I-Nikunau* and *Te Utu* of Study, rather than alternatives, such as Nikunau Island or the Kiribati Islands. As Morrell (1960) points out about writing Pacific history, "The proper subject of history is not an area but a community" (p. 1). Similarly, Macdonald (1996b) argues that

the primary identity [in the Kiribati Islands] was with the extended family household and its landholdings, then with a larger district grouping, still linked through the male line by common descent, and then with the island. Intermarriage might have established linkages to other adjacent islands to which descent might also be traced but this was usually beyond the horizon in a political as well as geographic sense. (p. 39).

The alternative of using the geographical identities mentioned above would give rise to several shortcomings. Studying only Nikunau Island would lose sight of significant demographical, economic and other consequences entailed in *I-Nikunau* being involved in temporary and permanent migrations, let alone emergence of their diaspora (see Page & Mercer, 2012). Studying the Kiribati Islands as a whole would open up too many possibilities. Despite much homogeneity and cohesion of language, culture and environment (Morrell, 1960; Rennie, 1981), inter-island differences exist among *I-Kiribati*. These

differences have given rise to these peoples responding to similar influences differently (Macdonald, 1982a), and so to consequences of accounting differing.

Our choice of identity also reflects a trend in the Pacific literature towards studying local or sub-national identities, events and circumstances, including those representing the boundaries of pre-colonial polities—previous tendencies were to study island groups with European names, and countries that have arisen out of colonies (Howe, 1979). In discussing this trend, Macdonald (1996b) suggests that studies should examine broader "imperial' or hegemonic relationships affecting the world more generally than just the Pacific; and the underlying forces that drive them" (p. 30) (see also Hezel, 1988). We have tried to do this, such as by referring to colonial accounting histories from elsewhere.

4 Classificatory Framework

During the interpretative process described in S3, the alterations and constancies we identified as "consequences" proliferated in number, range, duration and imprecision. As we compared, contrasted and otherwise considered these consequences, we began sorting them into types or classes, albeit imperfectly and with much overlapping. The idea, composition and configuration of a classificatory framework developed iteratively from there. We used the initial version to inform further iterations of the process of "observe, describe, connect, synthesise and classify", and concomitantly to devise further iterations of the framework. To reflect the overlapping, we chose a Venn diagram (Venn, 1880) available in Word 1997-2003.

There are 15 classes in our classificatory framework. These are arranged in Figure 3 to coincide roughly with the four themes in Figure 2. We explain and exemplify each class in turn in S4.1 to S4.15. The examples cover *I-Nikunau's* multigenerational experiences since at least the 1860s and so are socio-historical; in order to increase their relevance, we make a connection between each one and the present day. As the classes are all-embracing, and may even seem over-indulgent, they will be controversial, so much so that some readers might dismiss them as farfetched (cf. Solomons, 1991). Thus, the examples are intended not only to elaborate the meaning of the framework and support our argument but also to stem such controversy. We see the examples as also fulfilling our responsibility to *I-Nikunau* in the sense of helping them be more aware of negative consequences, and ameliorating or eliminating them.

For sake of coherence, we present the subsections in chronological order of the examples they contain, and so the classes follow this order, rather than how they appear in Figure 3. Much cross-referencing is made between subsections to reflect and emphasise the overlapping of usages and of the experiences from which the usages have obtained particular meaning and significance, at least as far as the non-*I-Nikunau* who introduced them are concerned. Mostly, it is these people who have used them, and although some *I-Nikunau* gradually became involved, it is still the case that usages are about *I-Nikunau*, rather than to them or even for them—"for" meaning "in their favour". The consequences are those experienced by *I-Nikunau*.

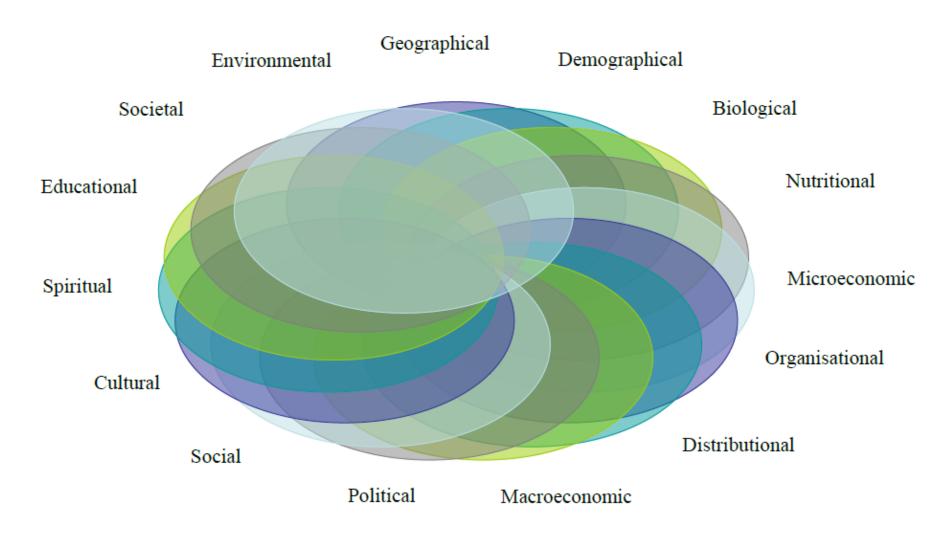


Figure 3. Classificatory framework of consequences of accounting usages specific to *I-Nikunau*

4.1 Biological

We class alterations in circumstances of an identity as biological consequences if they result from contact between and among humans with different genes or physical features (cf. Anderson, 2012). In the final third of the 19th Century, male *I-Matang* and Chinese trader-agents began residing on Nikunau. The background to this occurrence and the accounting entailed are related in Dixon and Gaffikin (2014, esp. pp. 688-689)⁸. In essence, four trading companies established permanent trade store/agencies on Nikunau, having calculated such agencies to be commercially viable once the commodity being transported was switched from coconut oil to copra (see Macdonald, 1982a; Maude, 1977; Maude & Leeson, 1965; Sabatier, 1939/1977; Willmott, 2007).

The stores entailed the earliest introduction to Nikunau of bookkeeping and accounting. Without the accounting, the principals would have been reticent to entrust their capital to agents in the quantities they did. The agents sent reports to their principals about this capital and used accounting records to facilitate order and control of the agencies' affairs. The principal—agent combinations were of the same race (i.e., either both were *I-Matang* or both were Chinese)—in the eyes of the principals, *I-Nikunau* lacked values, knowledge, skills and trustworthiness for such roles (Couper, 1967).

The notion of biological consequences arises from these men arriving unaccompanied and being permitted to marry *I-Nikunau* by *unimane* (\cong wise and respected old men), whose rule prevailed in *te mwaneaba* district. The mixed race offspring of these unions added to the gene pool and produced further offspring. Some offspring were trained in the knowledge and skills of storekeeping and accounting; they often took over the agency or obtained another elsewhere, as did their offspring (cf. Munro, 1987).

An ongoing legacy of the incidence of these agents (and later ones, including those of the Colony Government and aid agencies) derives from their descendants retaining his given name or surname as their surname. This retention is reflected in contemporary surnames among *I-Nikunau* and around the Kiribati Islands in general. Furthermore, corresponding to commercial knowledge, capital and, perhaps, acumen being imparted from one generation to the next, several families of *I-Matang* or Chinese descent are prominent in businesses, governmental bodies and other organisations on Tarawa and elsewhere.

4.2 Microeconomic

Microeconomic consequences are alterations that reflect changes in economic behaviours of economic entities (e.g., individuals, households, businesses, religious organisations, governmental bodies), or arise from income, consumption or wealth incentives among these entities (cf. Johnson, 2013). In the accounting literature, Google Scholar data shows most are referred to as "economic consequences", although macroeconomic consequences sometimes feature as well, without being distinguished (see Crawley, 2015).

Microeconomic consequences are reflected in how *I-Nikunau* responded to the opportunities afforded by the trade stores mentioned in S4.1. They could cut and dry copra more easily and efficiently than they could press oil. This incented them to increase nut harvesting and plant more of their *aba* (≅ areas and sections of land) with coconut palms; the time they spent on cultivating palms, and cutting and drying nuts increased (Macdonald, 1982a). Concomitantly, *I-Nikunau* could acquire trade goods in greater quantity and of a greater range than before, notwithstanding any disadvantage they suffered in the quality of the goods and the exchange rate between goods and copra. ⁹ Companies and their agents interpreted their revenues, costs, etc. to decide which items they could supply profitably, given how much copra *I-Nikunau* were producing and what it would fetch in Europe and elsewhere.

The companies undoubtedly took advantage of *I-Nikunau*'s ignorance of the fairness of prices at which they were buying goods and selling copra (cf. Bakre, 2008). Although this exploitation is plainer with hindsight than at the time, the period was not free of occasional disputes between *unimane* and traders over prices. Although their *I-Nikunau* managers were mostly at a knowledge disadvantage when dealing with external suppliers and intermediaries, a better deal for *I-Nikunau*

probably resulted from reconstituting the stores along cooperative lines under *I-Nikunau* governance and management (e.g., *Te Bobotin Nikunau* (≅ the Nikunau Island Cooperative Society), (see Couper, 1967, 1968; Dixon & Gaffikin, 2014, esp. p. 694; Maude, 1949; Roniti, 1985).

As regards coconuts and copra today, most households on Nikunau still rely on copra to buy goods with which to supplement the produce of their subsistence activities and to meet other cash obligations. However, through world market prices following a downward trend for almost a century (see Razzaque, Osafa-Kwaako & Grynberg, 2007), the Colony and Republic Governments have taken various interventionist actions to try to maintain the incomes of copra cutters; in recent decades this has included heavily subsidising the prices *I-Nikunau* receive for their copra. On Tarawa, *I-Nikunau* households have little land on which to dwell let alone grow coconut palms, and the few coconuts they do cultivate are used as victuals.

4.3 Spiritual

Spiritual or religious consequences are alterations reflecting changes to religiosity, religious beliefs, religious conversion, religious differences, etc. (cf. Midelfort, 1978). In the 1870s, the London Missionary Society stationed Samoan pastors on Nikunau to convert *I-Nikunau* to Christianity, an endeavour in which they had succeeded by the 1890s (Baranite, 1985; Grimble, 1989; Maude & Maude, 1994; Maude, 1967; Sabatier, 1939/1977). Although representatives of the Roman Catholic Church tried to follow a decade later, they were repulsed and their followers discriminated against; only after four decades of sectarian disputes did they eventually establish a permanent presence on the island, and the resulting duopoly continues on Nikunau.

The Samoan pastors were responsible for another introduction of accounting on Nikunau; indeed, as Dixon and Gaffikin (2014, esp. pp. 689-690) outline, accounting helped both denominations to flourish eventually. The Protestant church relied the more on local fundraising, and this was dependant on copra, and so the presence of trade stores; cash and goods remitted by absent workers (see S3) was also significant (e.g., see Borovnik, 2006). Copra collected by the religious organisations was transformed into funds, and thence into churches, pastors' dwellings, primary schools, bibles, prayer and hymnbooks (translated into *te taetae ni Kiribati*), operating expenses, etc. Surpluses were remitted to Beru, Tarawa and elsewhere up the hierarchies of both organisations, to finance such activities as training clergy and operating secondary schools, to which eventually some *I-Nikunau* teenagers were sent as boarders. In addition to what appeared in the organisations' books of accounts (which *I-Nikunau* were taught to write), *I-Nikunau* donated much by way of labour and materials, making handicrafts for resale, organising fundraising events, and feeding and looking after clergy, brothers, nuns, etc.

Today, the great proportion of *I-Nikunau*, wherever located, continue as practicing Christians and are frequently involved in church activities. The duopoly continues on Nikunau but on Tarawa and elsewhere other denominations are involved as well. Notwithstanding, many traditional beliefs and rituals continue, but mostly below the surface. On Tarawa, church activities often draw members of diasporic communities from across the Kiribati Islands, a routine example being the many children who attend church high schools (often because of insufficient places at high schools operated by the Republic Government). Meanwhile, in diasporic communities in various centres in New Zealand, church members fundraise and accumulate capital intending to invest in land, churches and pastor dwellings; their usages of accounting are important in organising and controlling these activities.

4.4 Cultural

Cultural consequences are alterations reflecting changes of shared habits, customs, ideas, etc. within an identity, these shared phenomena forming relatively loosely-structured systems of behaviours one might label culture (cf. Porter, 1997; Walker, 2003); and notwithstanding that the concept of culture has shortcomings (e.g., see Carnegie & Napier, 2002).

The culture developed by *I-Nikunau*, particularly their material culture, was evidenced by traditional physical objects, their form, range, origin, novelty, etc. (Koch, 1965/1986). The advent of trading

and the conversion to Christianity, as caused or possibilitated by the accounting and financial usages alluded to in S4.2 and S4.3, led to these traditional objects being augmented, replaced or displaced, along with many shared habits and ancestral and cultural knowledge that accompanied them. For example, cloth was imported because the missions forbade nakedness and required *I-Nikunau* to make and wear garments, despite the climate and increased incidence of disease. Other objects have included tobacco, weapons, hand tools and equipment, victuals, utensils, other domestic articles, religious objects, bicycles, boats, movies and entertainment technology (Geddes et al., 1982; Grimble, 1921, 1933, 1989; Lawrence, 1992; Lewis, 1988; Lundsgaarde, 1966; Office of Te Beretitenti & T'Makei Services, 2012a; Pacific Science Board, 1957; Sabatier, 1939/1977; Thomas, 2001, 2002).

Other significant changes include the church officials' reform of *I-Nikunau* settlements: having for centuries inhabited dispersed *kainga*, converts were encouraged, then pressured and, finally, legally obliged, to relocate to *te kawa* (≅ a clustered settlement/village). Soon, these came to be laid out in the present day pattern of neat rows adjacent to churches and church *mwaneaba*—all but one of the six pre-Christian *mwaneaba* are now in ruins (Geddes, 1977; Maude, 1963; Thomas, 2001). Conversion also led to traditional rituals being adapted or replaced with ones the pastors and priests invoked, in which religious books played a major part. Through these books, especially the translated versions, written materials came into most *I-Nikunau* households, and there was enthusiastic participation in church schools by *I-Nikunau* wanting to read and write. These schools led to displacement of the traditional curriculum (see Grimble, 1921; Teweiariki, n.d.) with one reflecting appropriate and befitting knowledge and skills as conceived by religious organisations especially and *I-Matang* more generally.

The insecure state of the material culture on Nikunau and Tarawa today, and the challenges of sustaining life in general (see Ministry of Environment, Lands and Agriculture Development, 2009), are due in no small way to losses among *I-Nikunau* of knowledge about and skills for living in a peculiar natural environment. The failure to hand down knowledge within generations of *I-Kiribati* is notwithstanding literacy skills having been attained in the secondary school system, or oral traditions still being strong, including in all the diasporic communities. The issue seems to have been whether to reposit technological knowledge no longer in use, in case its significance and value were to reoccur. Perhaps the most noteworthy case of knowledge being transmitted through traditional means has been in the sphere of dancing (see Autio, 2010; Whincup, 2009); although frowned on by the religious organisations, and "toned down" accordingly, this activity is a central feature within all the diasporic communities (see *Kiribati Dance-Independence celebrations*, 2015). A further collection of traditional knowledge to survive is that transmitted to the present not through traditional means but through *I-Matang* anthropologists, etc. (e.g., Grimble, the Maudes, Latouche, Geddes, Sabatier).

4.5 Political

Political consequences are alterations reflecting changes to politics, power or related matters, the structure or process of political governance, or the political systems of which an identity has been part (cf. Doronila, 1985; Jones, 2010). Nikunau, like the other Kiribati Islands, was politically autonomous until the 1890s; indeed, that autonomy had extended to each *mwaneaba* district (see Note 6). Internally, however, after 1840, this formal autonomy was increasingly subject to the presence, activities, influence and interference of the traders and missionaries. From the 1880s, officials of the British Government, one of the so-called Great (European) Powers as epitomised in Declaration between the Governments 1886 (see also Munro & Firth, 1990), became involved at a distance and then in loco.

The influence and interference were underpinned by asymmetric power relations between the outsiders and *I-Nikunau*, fostered greatly by knowledge, skills and rhetoric, including to an easily understated extent by accounting usages (see Dixon & Gaffikin, 2014, esp. pp. 689-692, 702-703). We allude in S4.1 to S4.4 to how these relations arose from the stores and churches, their spiritual and worldly goods, their resources and their accounting usages. Indeed, during the 1880s and 1890s,

the Samoan pastors had so usurped the traditional *mwaneaba* system on Nikunau that nearly four decades of theocratic governance ensued, under the pastors and, from 1900 until 1917, the zeal of the Revd William Goward, the chief missionary during that period. Financed with church taxes and copious fines for *I-Nikunau* committing even the most trivial misdemeanours, the regime imposed unfetteredly its version of colonial rule on Nikunau and its residents (whether Protestant, Catholic, traditional or atheist in their religious beliefs) (Macdonald, 1982a, Sabatier, 1939/1977). The clerics degraded anything about *I-Nikunau* that prevented them promoting their Christian myths, superstitions and impostures as superior, heroic, etc., thus making *te I-Nikunau* ashamed of his/her ancestry, socio-political institutions, etc. (see Grimble cited by Maude, 1989, p. xxiii) (cf. Bakre, 2004). The London Missionary Society regime prevailed despite Britain annexing Nikunau as part of a Protectorate in 1892; besides infrequent visits, the British authorities left Nikunau to the clerics, being satisfied to receive proceeds of poll and land taxes (e.g., see *Land (Copra) Tax Register 1910-1916*) they imposed from a distance to pay for administering the Colony.

Accounting calculations were a main reason for formal annexation not occurring until 1892 and for the designation even then of Protectorate (see Munro & Firth, 1986), rather than Colony¹⁰—the British Government did not want a colony that would be dependent on "subventions" from London (Dixon & Gaffikin, 2014, esp. pp. 690-691; Morgan, 1980). After 1892, inadequate funds and a preoccupation with the trading centres of Butaritari and Tarawa, and then with phosphate mining on Banaba, resulted in the aforementioned lack of presence on Nikunau. That is, until the excesses of Goward's regime could no longer be tolerated, and the Colony Government instituted a form of so-called indirect rule (see Davie, 2000, Newbury, 2004): it appointed Arthur Grimble as district officer for the Southern Gilberts and tried separating the Nikunau Native Government from the Protestant church (Grimble, 1952, 1957, Macdonald, 1982a). However, this merely altered the form of *I-Nikunau's* subjection to outsiders, and it has ebbed and flowed since, both as part of the Colony (see Macdonald's study of island government, 1971, 1972) and as part of the Republic.

As for how these developments were interpreted by *I-Nikunau*, besides referring to the Colony Government as *Te Tautaeka*, often with a sullen tone, there was plenty of room for a "working misunderstanding" between *I-Nikunau* and *I-Matang* in all the colonial pomp, formality and ceremony (cf. Bohannan, 1965; Lundsgaarde, 1968). Same seems to apply to the Republic Government, nearly 40 years on from the British Colony having given way to the Republic of Kiribati. Indeed, Nikunau is still enmeshed in political, administrative and accounting (e.g., estimates, operating grants, returns and audits) institutions that this independent, national government inherited, and to which *I-Nikunau* continue to refer to as *Te Tautaeka* with similar sullenness, despite the colonial autocracy having given way to a national democracy.

4.6 Distributional

Distributional consequences are alterations reflecting changes to how *aba*, income, wealth, consumption, welfare and wellbeing are distributed (cf. Arnold, 1991; Krueger & Donohoe, 2005; McGoun et al., 2007). We allude to this type of consequences in S4.2: *I-Nikunau* shared in the economics benefits of trade, but the lion's share seems to have gone to outsiders, partly because accounting advantaged these outsiders (cf. Hopwood, 2009). Another example relates to the extraction of phosphate on Banaba and Nauru, and its shipment to Australia and New Zealand for use as fertiliser (Williams & Macdonald, 1985). Dixon and Gaffikin (2014, esp. pp. 692-694) relate how accounting figured significantly in the distribution of benefits and costs, overtly and covertly, constructing a deceitful reality, especially given the public-governmental status of the British Phosphate Commission and the links one might have expected it to have to the British, Australian and New Zealand Governments (Megarry, n.d.; Macdonald, 1982b; Nauru Island Agreement of 1919). The phosphate was worth far more on the open market than the value-at-cost disclosed in the British Phosphate Commission annual accounts from 1919 to 1967 (e.g., House of Commons, 1940), as became more evident in subsequent years' accounts when its value was disclosed at its market price (Weeramantry, 1992).

Both as miners on Banaba and Nauru and as residents of the same sovereign territory where the mining of Banaba occurred, ¹¹ I-Nikunau were among the potential beneficiaries who comparatively speaking lost out in ways this value-added was distributed. Significant numbers of *I-Nikunau* men, women and children lived for up to several years at a time on Nauru and Banaba, and derived intrinsic and extrinsic benefits (and harms) therefrom, but on much less favourable terms than the non-native employees and the fertiliser, farming, food processing and retailing interests in Australia, New Zealand and Britain. The men were involved in the mining as labourers and the women worked as domestics and similar, but their wages were paltry compared with *I-Matang* employees—even the taxes, customs duties, etc. the latter were otherwise liable to under the laws of the Colony were transmuted into the sums paid annually by the British Phosphate Commission in lieu of taxes on profits, etc. Likewise their conditions: although they could access better medical services and the children had better access to schools than at home on Nikunau, the children did not develop knowledge and skills needed to live on Nikunau. Furthermore, I-Nikunau involvement in the mining was coerced: to ensure a supply of labour and keep labour costs down, all I-Kiribati were restricted from travelling anywhere to work, except the two phosphate islands (see Gilbert and Ellice Islands Protectorate (Consolidation) Regulation 1908); whereas, for the previous several decades they had been involved all over the Pacific in seafaring, and plantation, agricultural and mining labouring (see Bedford et al., 1980; Couper, 1967; Munro & Firth, 1986, 1990; Sabatier, 1939/1977).

Successive mining organisations chose to pay very little towards administration of the Colony Government, and when occasionally pressed to do so they denied having any responsibility to contribute towards social and economic development of the Colony. Indeed, even though many of its expenditures were on Banaba and arose through facilitating mining, the Colony Government raised much of its revenue from likes of *I-Nikunau* on islands in the Colony other than Banaba (Macdonald, 1982a). Although the Banabans and Nauruans shared in the intrinsic and extrinsic benefits (and harms) of mining as landowners, again this was on highly unfavourable terms. Above all else, their islands remain environmentally devastated, the Banabans live mostly in exile on Rabi Island, and the Nauru trust fund is empty—the Australian aid they receive is conditional on the Australian Government siting an infamous refugee-processing detention centre on their island (Gowdy & McDaniel, 1999; McAdam, 2014; Sigrah & King, 2001; Teaiwa, 2005; Weeramantry, 1992) (cf. Walker, 2003).

With hindsight, the accounting for the mining, etc. does not stand up to socio-political scrutiny (cf. Hines, 1989), with those in authority complicit in promoting the rich at the expense of the poor (cf. Gaffikin, 2009). However, notwithstanding today's tuna fishery exhibiting some parallels, this hindsight has had only a partial effect on the distribution of value-added arising from this fishery. The fishery is being exploited under licences granted to various foreign fleets but the licence fees are a small proportion only of the actual or even reported value of the fish caught. In any case, the surplus of fees revenue is invested outside Kiribati (Pretes & Gibson, 2008; Pretes & Petersen, 2004; Williams & Terawasi, 2012). Unlike the mining, there is very little employment with the fishery for any *I-Nikunau* or other *I-Kiribati*, except for personal goods and services supplied to ships' crews on onshore leave.

4.7 Organisational

Organisational consequences are alterations reflecting changes to the nature, purpose, performance, structure or process of organisations, or to participation in organisations (cf. Arnold, 1991; Bandury & Nahapiet, 1979; McGoun et al., 2007; Young, Peng, Ahlstrom, Bruton & Jiang, 2008). In S4.5, we allude to changes in organisational arrangements for administering Nikunau as part of the Colony. Relevant features of the changes are that *Te Tautaeka* (i.e., the Colony Government) sequestrated the accumulated surplus of the Nikunau Native Government (NNG) and reduced the NNG's financial and other areas of autonomy; the NNG became the lowest formal link in a chain of financial control and reporting stretching to the Colonial Office (see Dixon & Gaffikin, 2014, pp. 691-692).

Two important persons in how the NNG was controlled were the NNG's *I-Kiribati* scribe and *Te Tautaeka*'s district officer. Although probably not from Nikunau, the scribe would have had some affinity with *I-Nikunau*, through language, culture, etc. However, that was less true of the *I-Matang* district officer, with implications because he held the scribe to account. The district officer scrutinised the estimates and audited the account books and statements for which the scribe was responsible—see *NNG Cash Book 1915-1933* for evidence of the work of the scribe and the control of the district officer. He took away revenues, leaving the scribe with an imprest with which to pay authorised expenditures only; he sent reports to the resident commissioner; indeed, de facto, he appointed the NNG's *I-Kiribati* officials and, sometimes even, its *I-Nikunau* members (Grimble & Clarke, 1929; Macdonald, 1971).

Amazingly, these accounting controls and reports were exerted over paltry amounts as far as the Colony Government was concerned. For example, in the mid-1950s, annual expenditures by the NNG were less than AU£1,000 (Island Fund Estimates – Nikunau, 1957-67). In contrast, Colony Government annual recurrent expenditures were about AU£450,000 and it was administering a further AU£35,000 annually of capital grants from the British Government towards social and economic development projects (Gilbert and Ellice Islands Colony, 1957)—these grants were introduced following a philosophical change in British colonial policy coinciding with the Great Depression and can be conceived as the beginnings of today's aid industry (see Abbot, 1971; Dixon & Gaffikin, 2014, esp. pp. 694-695; Morgan, 1980). These circumstances indicate that the accounting was less about money *per se* than about colonial authorities overseeing and controlling organisations that appeared to belong to *I-Nikunau* (cf. Neu, Gomez, Graham & Heincke, 2006; Newbury, 2004).

The above sequestration and altered organisational arrangements had the long-lasting consequence of *I-Nikunau*'s usually sullen disposition towards *Te Tautaeka*, even in speaking of the Republic Government. Moreover, for several decades *I-Nikunau* saw the NNG more as a means of colonial subjection than of islander agency; this perception was despite several Colony Government efforts to overcome this attitude, including in 1966, when the name Nikunau Island Council (NIC) was applied (Macdonald, 1971, 1972). Even today, *I-Nikunau* regard the NIC warily. Besides, its senior staff are usually from other islands and about 80% of its funding arises from grants-in-aid supplied by *Te Tautaeka* and can only be spent in accordance with a budget approved by officials on Tarawa. Indeed, *I-Nikunau* have difficulty in paying taxes, etc. assessed by the NIC, some of that difficulty being a matter of reluctance to pay them. As a consequence, the NIC's reliance on these grants is even higher than 80%.

4.8 Educational

Educational consequences are alterations resulting in changes to the areas of knowledge in which an identity is educated, or to who educates the identity and how (cf. Liang & Chen, 2007). Pursuant to the creation and expansion of organisations referred to in S4.5 to S4.7, public and mining administration grew throughout the Colony period, giving rise to *I-Nikunau*, other *I-Kiribati* and Tuvaluan men performing clerical work, much of it pertaining to manual accounting methods involving considerable paperwork. From 1922, the clerks received suitable training at the King George V School (KGVS) on Tarawa, including in bookkeeping and financial administration. The establishment of KGVS marked the beginnings of the Colony Government being involved in providing formal education, although it was another three decades before this extended to primary education (through the replacement of church primary schools—see S4.4) and to secondary education for girls, at Elaine Bernacchi School (EBS).

Controversy over policy and resources caused this delayed involvement (Burnett, 2005; Macdonald, 1982a; Maude, 1977): Grimble and other Colony Government officials were concerned that educating *I-Nikunau* to too high a level could raise their expectations unrealistically and cause social disgruntlement and political discontent. Thus, they intended KGVS should teach only enough clerks as were needed at colony and district headquarters, by native governments and by the British

Phosphate Commission. However, the *I-Matang* teachers they recruited soon had other ideas; they extended the curriculum to broader subjects than would be required merely to clerk and they steadily increased student intakes. Their approach was supported increasingly by officials of the Colony Government and Western Pacific High Commission in the 1930s. However, funding and the Pacific War impeded the Colony Government's expansion into education, either secondary or primary; that is until capital grants became available in the 1950s from the Colonial Welfare and Development Fund (see S4.7), but even then the Colony Government was constrained because of having to meet operating expenses from local revenues.

In the 1970s, KGVEBS became coeducational and went onto more influential things, playing a significant part in shaping Kiribati and *I-Kiribati*, including many *I-Nikunau*. Indeed, along with other, mainly church secondary schools, it has had a pivotal role in changes related in S4.9 onwards. Furthermore, accounting is among the elective subjects taught in these schools. However, the accounting curriculum, which follows the New Zealand school syllabus, has a limited quantity only of technical materials sourced from Tarawa and little coverage, if any, of how accounting usages have helped shape the environment in which most of the students will spend their lives.

4.9 Geographical

Geographical consequences are alterations resulting in changes to where an identity normally lives, including through migration (Agyemang & Lehman, 2013; Hall, 2012). From about 1950, the Colony Government embarked on social, economic and political development policies that all involved *centralisation* on Tarawa, despite *I-Nikunau* and peoples from other islands not identifying with the Kiribati Islands as a single nation, let alone a nation that includes the extended territories of the Colony in the Line and Phoenix Archipelagos. Capital grants from Britain, and how they were administered, were significant to these policies. Typical of the time, the pursuit of efficiency (Hopwood, 1984) was taken for granted, notwithstanding its absence from *I-Kiribati* culture and its many ambiguities. In particular, reaping economies of scale, containing costs, and effecting financial and political control were seen as concomitant with centralisation, and so reinforced the belief in it held by officials in London and Tarawa. However, deeper analysis suggests that centralisation was a matter of administrative convenience (Macdonald, 1982a), and consistent with Britain's largely self-interested policy of colonies remaining intact after independence, with a seat of government well endowed with infrastructure, facilities, assets, etc. (Morgan, 1980).

The effect of centralisation, as reinforced by and operationalised through accounting (particularly project accounting), has been that an increasing proportion of *I-Nikunau* were incented to migrate from Nikunau to Tarawa. Initially, between the 1950s and 1970s, young I-Nikunau were mainly involved; mostly they accepted places at KGVEBS, being the higher academic achievers in the island's primary schools. Although these early emigrants might have been expecting to live away from Nikunau for only a few years, their academic achievements at secondary school, from which achievements at tertiary level followed in some cases, led to longer term or permanent migration. Work for which they were educated (e.g., medicine, nursing, secondary school and trades teaching, engineering, accounting, administration) was primarily on Tarawa, as were facilities in which they could share (i.e., the hospital, primary schools, shops, etc.), and so they have remained, married, and had children, grandchildren and great-grandchildren there. Furthermore, to fulfil accumulating socioeconomic, cultural and similar obligations to utu, these early I-Nikunau migrants to Tarawa arranged for their elderly dependents to join them on Tarawa; this substituted for these elderly needing their grown-up offspring to live with them on Nikunau in order to complete such tasks for them as fishing, domestic choring, and cultivating crops, cutting copra or otherwise working their aba. These early migrants were also obliged to accept young nephews and nieces, who either were not successful in leaving Nikunau via the high-achiever primary school route or whom they considered would have more chance of succeeding if they attended primary school on Tarawa. The parents of these youngsters saw better prospects for them, and eventually themselves, on Tarawa than on Nikunau. This supplementary migration had further consequences of marriage, children,

elderly dependents, etc. (Burnett, 2005; Dixon & Gaffikin, 2014, esp. pp. 694-696; Maude & Doran, 1966; Macdonald, 1982a, 1996a, 1998; MacKenzie, 2004).

These trends continue today among *I-Nikunau*. Thus, since 1950, the number of *I-Nikunau* living on Tarawa has increased from less than 100 to about 2,400, compared with less than 2,000 still living on Nikunau and just over 2,000 living elsewhere, mainly in diasporic communities. Indeed, of the latter, well over half were resident on Tarawa, rather than Nikunau, before they moved to their present abode, or are their offspring. As for the population of Tarawa, the example of *I-Nikunau* applies to all the Outer Islanders, and so explains in extent and reasons (i.e., migration and subsequent natural growth among the immigrants), a steep increase in that population (see Figure 4). Indeed, Tarawa has become the closest Kiribati has to an urban centre, in complete contrast to Nikunau and the other islands, whose total population has risen from about 28,000 in 1950 to just over 50,000 now (Gilbert and Ellice Islands Colony, 1957; Kiribati National Statistics Office, 2013).

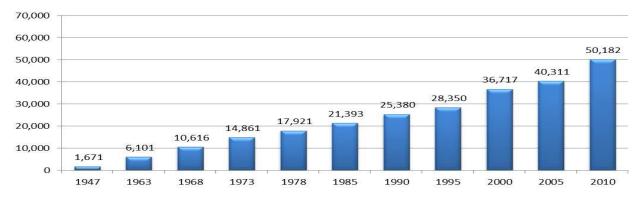


Figure 4. Growth in Population of South Tarawa (Source: Office of Te Beretitenti & T'Makei Services, 2012b)

Concomitantly, during all these occurrences, centralisation has continued with minor deviations only. It has been fuelled by external supply of infrastructure, capital to develop services and facilities (e.g., hospitals, schools) and expert advice, all supplied by a global aid industry under the changing auspices of "aid", "development assistance" and then "investment partnership". The subsidy of the price *I-Nikunau* and other Outer Islanders receive for copra (see S4.2) is one of few incentives they have for not migrating to Tarawa.

4.10 Demographical

Demographical consequences are alterations reflecting changes to the size or composition of population, or the forms of settlement, categories of occupation or patterns of migration (cf. Locke, Adger & Kelly, 2000). The number of *I-Nikunau*, wherever located, has probably tripled or even quadrupled since the 1820s. This growth is attributable to a steady increase in life expectancy and relaxing of birth control practices, including because it became possible to feed more children and because of new religious mores. Associated reasons are threefold: more effective health and welfare interventions being available, including around childbirth, water, infectious diseases and easily-treated conditions; lower violence, including less warfare; and greater "food and nutrition security" (Campbell, 1991), because of lower susceptibility to the vagaries of drought, and so famine. The increase in life expectancy is despite the adverse nature of some nutritional consequences explained in S4.11.

Links between these reasons for population change and accounting usages may seem tenuous. *I-Nikunau* increased their incomes through trade in copra, and so obtained access not only to imported victuals but also to the means of increasing subsistence production, for example by using better tools and equipment. The traders, and the clerics, also possessed "general knowledge" of which *I-Nikunau* were unsure or unaware and shared some of it informally. The clerics raised funds and expended them on education, and on rule making and enforcement, in which cleanliness, order, civility and similar were emphasised. They also reduced abortion and infanticide, and imparted knowledge of

health and wellbeing. According to Macdonald (1982a), the Colony Government financed a policy of civilisation (1880s-1930s), including cleanliness, safety and protection, and remodelling settlements (i.e., from *kainga* to *kawa*—see S4.4) (e.g., see Regulations for the good order and cleanliness of the Gilbert and Ellice Islands 1933). Subsequently, its policy involved development, which extended to health, education, water, sanitation (e.g., see Gilbert and Ellice Islands Colony, 1957, 1969); after 1979, this mantle of social and economic development was assumed by various Asia-Pacific and world aid agencies (see Asian Development Bank, 2008).

Regarding aid, population change was the reason for the first project in the Colony, giving rise to another example of geographic consequences. In 1938, being concerned that Nikunau and neighbouring islands were too drought prone and infertile to support increases occurring in their populations, British officials conceived the idea of resettling some *I-Nikunau* on the uninhabited Phoenix Islands (Laxton, 1951; Maude, 1952). However, barely 20 years later under another resettlement project, they and another contingent of *I-Nikunau* were removed to Wagina and Ghizo, giving rise to the present diasporic community on these two Solomon Islands and, because of subsequent urban migration, in Honiara. Although the second move was mostly attributed to difficulties with surviving on the Phoenix Islands, another reason was that the expenses of administering the extremely remote new settlements (lat. 3°–4°S, long. 171°–174°W) were beyond the affordance of the Colony Government. Having the settlers in the British Solomon Island Protectorate was cheaper and more expedient for Colony Government and Western Pacific High Commission officials—the latter had shifted their headquarters to Honiara a few years earlier—no matter various immediate and knock-on consequences (see Cochrane, 1969, 1970; Fraenkel, 2003; Larmour, 1984).

Regarding demographic consequences relating to the form and nature of settlements, those on Wagina and Ghizo still reflect tradition on Nikunau, being respectively *kawa* of a rural nature, surrounded by *aba* on which villages subsist (Knudson, 1965); similar applies to diasporic communities on the Line Islands arising from further resettlement projects. In contrast, the diasporic community on Tarawa (see S4.9) has become increasingly urban in nature, with much overcrowding and little land on which to maintain even the occasional coconut, papaya, breadfruit or pandanus tree. *I-Nikunau* households are scattered among households belonging to other communities, and they mostly live on earnings from employment, profits from running microbusinesses and pensions. The diasporic communities in metropolitan countries are even more urbanised, more scattered, among greater populations (e.g., in Britain, they are dispersed throughout England and Wales; in New Zealand, most are in the six largest cities). Even so, the sense of interdependence, helping each other out, cooperating, coming together and belonging seems to be much stronger among these diasporic communities than in most of the ethnocultural groups among which these communities live.

4.11 Nutritional

Nutritional consequences are alterations reflecting changes to the health and quality of life outcomes associated with the range or quantity of victuals that an identity consumes (cf. Campbell, 1991). Greater knowledge of, demand for and availability of non-native victuals (e.g., flour, rice, sugar, tea, coffee, milk powder, cordial, and tinned fish, meat, dairy, fruit and vegetables) have arisen among *I-Nikunau* through contacts and activities related in S4.1 to S4.10. Examples of how accounting usages are implicated include that trade store proprietors increased their purchases of copra and their profitability by selling imported victuals, regardless of their nutritional value or toxicity. Employers, notably the British Phosphate Commission, increased productivity and reduced costs by supplying families with imported rations (e.g., see Gilbert and Ellice Islands Protectorate (Consolidation) Regulation 1908); this action was in order that *I-Nikunau* would not have to spend time cultivating crops and fishing, instead of mining, etc. These two circumstances in particular had various continuing nutritional consequences for *I-Nikunau*, which Lewis (1988) identifies as gustatory subversion and nutritional dependency on metropolitan countries, with various health, illness and medicine ramifications (see also Thomas, 2002).

Today, these nutritional consequences continue among *I-Nikunau*. On Tarawa, for example, as well as having little land to cultivate crops, *I-Nikunau* find fishing unproductive, because of over-fishing and loss of previously common skills (Ministry of Environment, Lands and Agriculture Development, 2009; Thomas, 2002). In New Zealand, most *I-Nikunau* and other *I-Kiribati* are in the lower deciles of the income scale, and tend to consume victuals accordingly; besides, most lived on Tarawa before their migration to New Zealand and tend to know only about victuals they had been used to there. Thus, the most popular victuals at *botaki* (≅ celebratory or critical life stage gatherings) reflect the above list, and are mostly high in salt, sugar or fat, naturally or because of how they are prepared; this choice is notwithstanding the much wider and cheaper range of fresh fruit, vegetables and lean meat available in New Zealand than on Tarawa.

4.12 Macroeconomic

Macroeconomic consequences are alterations resulting in changes to an economic system, including to production, consumption, savings and investment, imports and exports, taxation and public expenditure, or employment (cf. Blomberg, Hess & Orphanides, 2004). This definition encompasses, but is more expansive than, the notion of accounting information figuring in the compilation of macroeconomic indicators, and so influencing decisions of economic policy setters (e.g., see Crawley, 2015). Macroeconomic consequences experienced among *I-Nikunau* are exemplified in their economic systems before the 1820s compared with the 1960s and with the present.

Before the 1820s, *I-Nikunau* comprised an isolated, self-sufficient/reliant, island economy, based on subsisting on poor, drought-prone *aba*, the reef, two freshwater ponds and the nearby parts of the ocean (Di Piazza, 2001; Ministry of Environment, Lands and Agriculture Development, 2009; Thomas, 2001). Production, consumption, savings and investment, and taxation and public expenditure involved subsistence produce, and *kainga*, *mwaneaba*, *botaki*, and related socioeconomic and cultural elements—nothing was only "economic". Order was maintained through the six *mwaneaba* district gerontocracies, in each of which all *boti* (\cong clans, but see Maude, 1963) in the district participated on a near equal basis.

By the 1960s, most *I-Nikunau* were still part of the Nikunau economy: even those who travelled elsewhere for employment normally returned to Nikunau after their contracts were completed. The economy retained some isolation and self-sufficiency, because of physical remoteness and lack of export value, despite copra. Even so, as S4.1 to S4.11 allude to, the copra, remittances and imports, comprising not only consumables but also technology, knowledge and beliefs, all represented changes to the economy, and more changes were in the offing. Indeed, *I-Nikunau*, whether collectively, in various sub-groups or individually, had been and still were involved in activities not only on Nikunau but also on nearby islands or further afield, beyond the Pacific even, albeit at the level of the toilers, not higher up (cf. Munro, 1987). *I-Nikunau* produced more for themselves, as well as for others, and consumed more, and were familiar with a wider range of goods and services than before trade, or Christianity for that matter. However, as facilitated by accounting usages, a significant part of their produce and limited cash incomes went to finance governmental and religious organisations' activities, including many not only external to their *mwaneaba* districts but also off the island.

By the present day, a majority of *I-Nikunau* no longer lives on Nikunau, and their largest diasporic community is on Tarawa. The economy there "developed" on the back of the centralisation policy related in S4.9 and has become increasingly monetised (see Asian Development Bank, 2002; Office of Te Beretitenti & T'Makei Services, 2012b), giving rise to a widening gap between life of those *I-Nikunau* on Tarawa today and life of either their ancestors on Nikunau or *I-Nikunau* remaining on Nikunau. However, the level at which *I-Nikunau* participate in that economy varies. Occasionally, some have been close to its centre, including having some involvement in the accounting that facilitates it (e.g., as ministers and government department secretaries of finance, government accountants, accounts clerks, etc.) But as their migration has been fuelled less by education (see S4.8 and S4.9) and more by *utu* relations (see S4.9), so increasingly more *I-Nikunau* are only on its

periphery, exhibiting signs of the "increased economic frustration" (Asian Development Bank, 2006, p. 1) many other people on Tarawa are feeling. Even those with some qualifications struggle to derive income from skilled or professional employment, or running their own private business, and so shake off dependency. Indeed, paid employment of any kind is difficult to find, particularly for young adults, because demand for even casual, unskilled jobs greatly exceeds supply (see Duncan, 2014). However, despite this unfitness and lack of opportunity to extend their modern life in this market economy, *I-Nikunau* possess neither the inclination nor the knowledge and skills (see S4.8) to take up a subsistence life on Nikunau, despite probably having rights to use *aba* there (see S4.13). These circumstances are significant to how some *I-Nikunau* have moved to other monetised economies, either as temporary seasonal workers (e.g., see Ministry of Business Innovation and Employment, 2015) or under labour migration schemes (e.g., see Immigration New Zealand, 2015), and to many more desiring to do so.

Regarding Nikunau and its economy, the island is suffering so-called *backwash*—negative effects that growth and development at the centre can have on conditions at the periphery (see Brookfield, 1972; Couper, 1967; De Haas, 2010; Myrdal, 1957). Emigration and parallel occurrences have resulted in resources being drained from Nikunau to Tarawa; the resources referred to are political, social and cultural, as well as economic. Concomitantly, the Nikunau economy, though still isolated geographically, has become more dependent on outsiders, notably members of the diasporic communities on Tarawa and in the metropolitan countries, and the Republic Government. Increasingly, the balance between the two has tilted away from private dependence based on *utu* relations towards government dependence. The latter arises through necessity, on political as well as social and economic grounds, for the Republic Government to provide copra subsidies (see S4.5), Nikunau Island Council grants-in-aid (see S4.7) and state pensions for all persons over 70 years of age, and gives *Te Tautaeka* plenty scope for intervention and restriction in life on Nikunau.

4.13 Social

Social consequences are alterations reflecting changes to social relations, individuality and communality, domesticity, work and family, longevity, wellness, etc. (cf. Pedraza, 1991; Walker, 2003). Various social consequences have arisen alongside the matters covered in S4.1 to S4.12; most are one or two non-accounting consequences removed from the accounting usages and their consequences. They include an increased sense of individuality through copra production, trade, paid work, and giving a personal reckoning to Jehovah, alongside the demise of the once paramount institution of (loyalty to) *boti* (Grimble, 1989; Maude & Maude, 1931; Maude, 1963), and even challenging that of (obligations within) *utu* (Goodenough, 1955; Lundsgaarde & Silverman, 1972). Loss of the latter is more so in diasporic communities in metropolitan countries than in urbanised Tarawa and Honiara, and in turn on traditional Nikunau, the Line Islands, Wagina and Ghizo; this is notwithstanding the remark in S4.10 that these metropolitan communities have a much stronger sense of interdependence, belonging, etc., than many other ethnocultural communities among which they live.

This distinction of *I-Nikunau* in traditional, urban island and metropolitan settings applies in other social matters. It applies in gender roles: these roles have become less marked, including in the knowledge and skills learnt and practised because someone is male or female, but more so the further ones goes away from Nikunau, although even on Nikunau there are women pastors and governmental administrators. It applies in relations between the young and the old (particularly those accorded the status of *unimane*): while still respectful, these relations have altered according to the more worldly knowledge, formal qualifications, higher position in workplaces and higher income of the more élite among the younger generations in urban and metropolitan settings.

The distinction also applies in the social and, for that matter, economic and cultural significances that *aba* had on Nikunau. In the 19th Century and up to the middle of the 20th Century, *aba* were vital for all *I-Nikunau* whether they were on Nikunau or away from the island "temporarily". *I-Nikunau* were born on their *aba*, they conversed with friends, worshipped and were buried on them; and they were

prepared to defend them. *Aba* symbolised status and were of social and spiritual significance (Baaro, 1987; Lundsgaarde, 1974; Macdonald, 1971, 1982a; Maude, 1963; Maude & Maude, 1931; Pole, 1995; Roniti, 1988; Sabatier, 1939/1977; Thomas, 2001). The number of terms in *te taetae ni Kiribati* relating to *aba* reflect these significances (see Trussel & Groves, 1978/2003). Ownership implied enjoying the right to use *te aba* in life, and mostly to transfer it on at death to a member of *utu ni kaan* (\$\circ\$ close kin) as *te aba n utu*. The exceptions stemmed from wars, leading to *te aba n toka* belonging to the vanquished being shared out (and captured former owners being enslaved). *Te aba n tibu* was given for *tibutibu* (\$\circ\$ adoption). *Te aba te bora* was given as part of *tinaba* relationships (\$\circ\$ sexual relationships associated with marriage but not between the marriage partners). *Te aba n nebonebo* formed compensation for serious wrongdoings, breach of promise of marriage, etc. *Te aba ni kakua* was given as a mark of gratitude for assistance. *Te aba ni mumuta* was given as a reward for nursing. *Te aba n tangira* was a gift for other reasons. Similar customary rights over marine areas within and just beyond the reef were vested in *te I-Nikunau* and inherited or gifted similarly.

These matters of *aba*, along with reef and similar asset registers and genealogical records (e.g., Uering, 1979¹²) made for an indigenous accounting (cf. Gallhofer, Gibson, Haslam, McNicholas & Takiari, 2000; Gibson, 2000; Greer & Patel, 2000), the oral records of which were maintained by *unimane* and tested from time to time in the *mwaneaba* of a district (Grimble, 1989; Maude, 1963). Although these records seem largely defunct, some come to light occasionally in the Nikunau Land Court, alongside written registers (e.g., *Register of Landowners and Lands 1908*) that have accumulated from various external attempts to replace the oral with the written (Baaro, 1987; Pole, 1995). These court proceedings indicate that remnants persist of *aba's* previous significance. However, this significance has been virtually expunged among diasporic communities in urban and metropolitan places, alongside changes in the social and related matters with which acquiring *aba* was associated; even so, many members of these communities are apt to say that they still have *aba* on Nikunau.

4.14 Societal

Societal consequences are alterations affecting an identity's society or that have resulted in changes to the entities that comprise its society (e.g., individuals, groups, organisations, polities) (cf. Modell, 2014; Nunn, 2013; Wejnert, 2002). As is evident in S4.1 to S4.13, *I-Nikunau* as a people and/or as a society have experienced unprecedented social, economic, cultural and natural change since they were encountered by *I-Matang* whalers; this was observed about "Kiribati" by Sabatier (1939/1977) a century ago and Macdonald (1982a) three decades ago, and is a pattern often repeated in many Pacific Island societies (see Nunn, 2013). As for these societal changes being consequences of accounting, the associations are possibilitative largely. Accounting usages, in conjunction with much else, facilitated a variety of not only economic but also political, cultural and social interactions with outsiders, and stimulated emigration and the emergence of diasporic communities. Not only have these interactions and movements given rise to various sub-societal consequences, some of which we have included in S4.1 to S4.13 as examples, but also, when considered together, they amount to societal consequences for *I-Nikunau* and for other *I-Kiribati* in Kiribati and in the other places they now reside.

Thus, from being self-reliant and communitarian on their island eight generations ago, and isolated to an extent that is difficult to conceive today, *I-Nikunau* are now widespread geographically and part of the increasingly interdependent global society—this condition even applies to those remaining on Nikunau. They are politically interdependent, with the Government of the Republic of Kiribati, which is a member of the United Nations and the International Monetary Fund, to name but two bodies that have some influence over their development. They are socially interdependent, with the other societies around them, in Kiribati and outside it. This condition extends to spiritual interdependence, worshipping the same god as many others around the world, and adhering to the ethical and moral rules associated with this religion. They are economically interdependent, supplying labour and copra, and permitting foreign fleets to fish their Extended Economic Zone for tuna under licence, for example; and in return receiving goods, services and cash, much of which is invested abroad.

Through this economic and political interdependence, they have been able to migrate and settle away from Nikunau, just as in the past their political dependence led to some settling on Tarawa and in the Solomon Islands. Most of this interdependence is asymmetrical, the distribution of benefit favouring the other parties. They are culturally interdependent, as exemplified among the diasporic community in metropolitan New Zealand in particular, which seemingly maintains and re-constructs its distinctiveness, while simultaneously acquiring footholds in the host community(ies) (Fedor, 2012; Gillard & Dyson, n.d.; Roman, 2014; Taberannang, 2011) (cf. Agyemang & Lehman, 2013; Berry, 1997, 2005; Watkin Lui, 2009).

4.15 Environmental

Environmental consequences are alterations resulting in changes to an identity's natural environment (cf. Hopwood, 2009; Locke et al., 2000). Trends in climatic conditions, sea level rise and their likely dire consequences on low-lying islands—nowhere are Nikunau or Tarawa more than 5m above sea level and security of land and of freshwater supply are issues (see Donner & Webber, 2014; White et al., 2007)—have brought *I-Nikunau* (and *I-Kiribati*) to the world's attention (see Bedford & Bedford, 2010; Nunn, 2013; Thomas, 2001; Wyett, 2014). Of less popular concern, but no less real and immediate, are the environmentally impaired living conditions of *I-Nikunau* on a Tarawa that is overcrowded because of still rampant migration and a high rate of natural population increase (Thomas, 2002); even the free-market leaning Asian Development Bank (2006) describes the environmental strain being put on the atoll as "a worrisome trend" (p. 1). The overcrowded and environmentally degrading circumstances of most residents, coupled with their straitened economic circumstances and cultural constraints on their adaptive capacity (Kuruppu, 2006), are giving rise to chronic health problems and economic, if not cultural, poverty (cf. Bryant-Tokalau, 1995; Locke, 2009).

The associations between both these developing environmental circumstances of *I-Nikunau* and accountings are largely possibilitative. In S4.9 and elsewhere, we associate the migration to Tarawa, and so the overcrowding, with accounting usages in the 70 years since Tarawa became the headquarters of the post-war Colony Government. Of particular significance are decisions about the nature and distribution of externally-capitalised human, intangible and urban infrastructure projects (e.g., transport facilities, vehicles and operations; utilities, waste, public institutions, retailers and suppliers, coastal defences); ironically, many environmental issues on Tarawa stem from the overcrowding having rendered said infrastructure inadequate.

Elaborating further on similar decisions since 1979, most of the capital formation has arisen from standalone projects "financed" mainly in kind; this is notwithstanding some semblance being maintained of the national planning that characterised British colonial policies in the post-war era (see Gilbert and Ellice Islands Colony, 1946; Government of Kiribati, 2012; Morgan, 1980) and the rhetoric of Millennium goals and similar aspirations suggestive of direction, coordination and unity of altruistic purpose. Further detracting from possibilities of planning and coordination is that the external persons associated with making and taking decisions about projects have become increasingly diverse, including being geographically dispersed. Some have visited or resided temporarily on Tarawa—very few have ever been to Nikunau; others are located in the distant regional or global headquarters of a significant list of aid industry organisations (e.g., in Beijing, Brussels, Canberra, Manila, New York, Taiwan, Tokyo, Washington) (see Dixon & Gaffikin, 2014, esp. pp. 696-698; cf. Brown, 2012; Neu et al., 2006; Stubbs, 2003; Webster, 2008).

Most of the projects that have proceeded have done so after being evaluated according to policies and criteria of whichever donor organisation has been involved. Formally, the Republic Government has also to approve each project but questioning a donor's judgment and generosity is not easy, either culturally, or technically or expertly, including in the area of finances. Although differing among the donor organisations, these policies and criteria seem to have things in common: they use short-term, micro-economic techniques; they play down externalities, including environmental ones and others reflected in S4.1 to S4.15; and they tend to presume that the recurrent operating costs of project

assets and post-project follow-ons (including costs of maintenance and renewals, and of dismantling, waste disposal and reinstatement of sites) can be met from votes in the Republic Government's budget. Most individual donors also lack concern about how the combined operating costs of all projects affect the Republic Government's finances in the medium- and long-term.

As its total operating costs have increased, so the Republic Government has been "advised" by external consultants to reduce communitarian activities (e.g., see International Monetary Fund, 2014). This is a significant reason for the costs referred to above not being met, and for environmental consequences arising for this and other reasons. In following this "advice", the Republic Government has mostly chosen to maintain public service employment and remuneration, and so chosen to restrict spending on consumables, and on repairs, renewals and reinstatements. While this policy choice has ensured that most households on Tarawa have a salary or wage earner, these earners/employees have been unable to perform all the work possible in their jobs, for want of tools, materials, parts, equipment, fuel, tickets to travel, etc. etc. Hence, for example, unmaintained refuse vehicles are unfit to function (and will most likely become wrecks themselves), refuse collection employees are idle, and residents fly-tip their household refuse near the lagoon and ocean edges. Similar "problems" one observes include unrepaired government vehicles rusting in compounds next to crowded residential areas, power houses surrounded by diesel waste, unused premises being in a dilapidated state, private vehicles rusting where they broke-down, and sea-walls, causeways and roads in dangerous states of disrepair. Concomitantly, the remuneration received by Republic Government employees has fuelled growth of personal, household and other consumables (and refuse). However, this has not given rise to much by way of multiplier effects either to private domestic capital investment and local employment, or to increases in direct tax revenues, etc. because, rather than being produced domestically, virtually all the consumables are imported.

The association between climate change and accountings seems to be a consequence of omission. While at various times in the 20th Century some industrialised parts of the world had begun to recognise matters of pollution, etc. as externalities, this recognition was associated with the need to clean air and waterways, reclaim land, etc. in the vicinity. Associations were made much later with concerns for *I-Nikunau* and similar peoples residing well away from the industrialised North Atlantic and regarded as unimportant, or for Earth as a planet and for the Earthlings (e.g., see Gray & Laughlin, 1991). This delay has even applied in matters of local clean-up, where the polluter is reluctant to bear the cost—an example already referred to in S4.6 is the failed attempt by the Banabans to have the British Phosphate Commission and British Government restore Banaba, and similar applied to the Kiritimati (i.e., Christmas) Island nuclear bomb test site in eastern Kiribati.

When it comes to matters of climate and sea level, in addition to continuing denial in some quarters that there is a problem, it is difficult to know what to do and impossible to calculate the costs (see Milne, 1991). Meanwhile, some *I-Nikunau* are taking matters into their own hands by migrating to higher, lusher ground elsewhere, often using *utu* and other cultural ties alongside opportunities afforded by study abroad and labour migration schemes, and once there, settling and carving out an identity among other ethnocultural groups (e.g., see Bedford & Bedford, 2010; Fedor, 2012; Gillard & Dyson, n.d.; *Kiribati and climate change*, 2010; McAdam, 2014; Roman, 2014; Williams, 2008; Wyett, 2014).

5 Conclusion and Further Research

This article is about devising classificatory frameworks of accountings' consequences. Various conclusions can be drawn from our study and the matters about which we have reported. First, it is possible to delve into, narrate and classify consequences that accounting usages involving various people in several guises can have for a given identity. We have shown how this can be achieved, including that by taking a broad approach to searching them out, the consequences surfaced will range across the social, political, economic, cultural and historical, notwithstanding conventional conceptions of accounting as technical and operating in a vacuum (cf. Carnegie & Napier, 2002). Indeed, what we describe as consequences of accounting usages are largely inseparable from the

consequences of "non-accounting"; many of them exhibit the indirectness and similar matters we raised in S2. Some have been short-term and others long-term, continuing and still in progress and not yet elaborated; some links in chain reactions, including responses, resistances or opposing actions; and some incidental to other, more significant, consequences. Each may be considered as having good, desirable and favourable properties, and the opposite. Notwithstanding, we acknowledge that the possibilities of classes and descriptors in our framework are open-ended; for example, we have left out legal and medical consequences, which although alluded to in our examples, respectively, of political and organisational consequences (S4.5 and S4.7) and nutritional and social consequences (S4.11 and S4.13) may be consequences of these accounting consequences. We also acknowledge that other classes could be equally valid, instead of ones we use or in addition to them. In any case, consistent with our subjective stance and constructivist approach, we appreciate that no right or final answer exists, only more insights and possibilities of greater understanding.

Second, we show that appreciating and classifying consequences of accounting usages is an interpretative process. It allows and requires taking several perspectives, applying lateral thinking and examining an identity or domain of inquiry longitudinally; it involves exceeding direct, intentional, first-stage changes to (or, indeed, preservations of) the circumstances of the identity, and so appreciating and making a theoretical case for the chains of consequences and responses that have arisen or might arise in future. The approach is relevant for identities inside or outside an accounting or legal or administrative entity, to appreciate how much economic, social, political and cultural advantage, exploitation and mistake can derive from accounting usages therein. The approach encourages comparison of consequences as conceived from different perspectives, such as between a critical perspective and an agency perspective in our case.

Following on from our first and second, including taking considerations we raise into account, we commend our approach to researchers not only of accounting but also of other disciplines, and for application in various other contexts. Our third goes into the question, why. As we argued in S1, deliberating and knowing more about the consequences of accounting usages in particular contexts for given identities is supremely relevant and important. For reasons of affinity, intensity and their potential benefit, we chose as our identity *I-Nikunau* and their Diaspora; our aim has been to reveal positive and negative outcomes for them, with the prospect of negative outcomes being addressed and ameliorated or eliminated, just as they might be from application to other situations of our findings about surfacing consequences.

Undoubtedly, many of the consequences we elaborate may be regarded as unfortunate, unintentional and impossible to have anticipated; however, others, even though also unintended, etc. might be seen, at least from an islander agency perspective, as fortuitous and a windfall. A good proportion of *I-Nikunau* seems economically better off, and have greater life expectancy and similar advantages compared with their ancestors. Indeed, compared with what might have been without I-Nikunau-I-Matang contact eight generations ago, the consequences of accounting usages have been more advantageous than disadvantageous, as have the consequences of the organisational structures and processes that are associated with these usages. But could they have been even better? This question is alluded to by Dixon and Gaffikin (2014) in raising matters of accounting usages being inadequate as to secrecy, asymmetric in terms of power relations, and *I-Nikunau* and other *I-Kiribati* hardly participating in them. Certainly, the examples provided in S4 draw on various occurrences that have served to (re-)define, enclose, exploit and subjugate *I-Nikunau* and expose the present-day and earlier consequences for I-Nikunau as being inadequate from the standpoint of some absolute standards of human conditions, human relations, justice, fairness, emancipation, etc. One lesson to arise is that the adverse unforeseen or unintended consequences derive partly because people involved in accounting usages did not look as far enough ahead or their thinking was constrained laterally—we acknowledge having had the benefit of hindsight in appreciating and classifying consequences, and having been able to exercise 21st Century insights, perspectives, knowledge and skills; indeed, our judgement is coloured by 21st Century beliefs and values, and from being non-I-Nikunau in comfortable metropolitan academic circumstances (cf. Carnegie & Napier, 2002). On thinking being constrained

laterally, much of this may be attributable to what is noted in S3 about how narrowly accounting is defined, officially and professionally, and how it is popularly understood.

We appreciate that the people in any way responsible for accountings and their applications cannot always know the full consequences, which is a good reason for guilt and blame not following on automatically from adverse consequences arising. However, it is all the more reason for these people to try to anticipate them and behave accordingly (Ridgway, 1956), including accepting some responsibility for consequences, no matter how "outside" their span of authority and control the consequences might seem (cf. Prakash & Rappaport, 1977). Thus, on the matter of lessons, we contend that learning is prominent among reasons for knowledge about consequences being relevant and important to the accounting academic and professional community at large. Technical learning and competence, and related formistic-mechanistic knowledge, dominates accountant education, and even education in accounting, and so undoubtedly has some importance. However, without an education encompassing thoughts about the consequences of accounting, graduates (and the accountants they become) lack contextualistic-organic knowledge. This omission is detrimental to themselves, their profession, and the organisations and societies they populate (Boyce, 2004; Laughlin, 1999; Low, Davey & Hooper, 2008; Roslender, 1996; Tsoukas, 1994; Young & Annisette, 2009). Similar applies to accounting learning for other graduates/professional persons; they are often obliged to use accounting in their specialist activities (e.g., marketing, religious affairs, medicine, development work, human resource management).

What we have presented about accountings' consequences contrasts with how accountings have been viewed so far by many of those with authority in Kiribati, and even some in the Gilbert and Ellice Islands Colony; that is, accounting is seen as facilitating solutions (e.g., through its use in finance procurement and performing projects), whereas we are arguing that it has contributed to a continuing accumulation of unresolved issues, objectionable circumstances and dependency. Thus, we argue for these usages to be critically revised, along with the related paraphernalia of aid and postcolonial government, an argument we believe applies beyond Kiribati, since donors and their agents use similar paraphernalia worldwide.

Fourth, our article raises issues of whether, from a critical human rights and social justice viewpoint, it is enough for *I-Nikunau*, or an identity in a similar position, to have obtained only incidental benefits well down the pecking order. And if not, what is to be done, if anything, about recompense, restitution, redress and reinstatement? What should be done about improving unsatisfactory present day conditions and emancipating even the humblest members of this identity's most scattered communities, who include the third of *I-Nikunau* who remain on Nikunau? What should be done in order to avoid such conditions occurring in future?

We observed that Tarawa has been seen as the obvious and critical place to start, given the overcrowded, increasingly squalid, unhealthy, economic frustrating and environmentally degraded conditions of its *I-Nikunau* diasporic community. However, the local issues are complex, and "starting" on Tarawa seems to have resulted in unsatisfactory outcomes so far. Virtually all the expertise and capital have been absorbed there, and its circumstances continue to provide incentives to migrate there, in search of greater private affluence, modernity and social security; Nikunau and the other Outer Islands meanwhile endure backwash of economic, social, societal and environmental kinds (see S4.12 to S4.15). However, prominent and significant numbers of *I-Nikunau* and others on Tarawa are increasingly weighing up these issues along with issues of the climate changing, the level of the sea rising and water resources on Nikunau, Tarawa and the other atoll or low-lying reef islands being compromised (Mimura et al., 2007). This is reflected in speculation about all manner of things connected with migration and resettlement, including to or in New Zealand (e.g., see Radio New Zealand, 2015).

Fifth, we alluded in S3 to the matter of how accounting is defined and understood, and how this is significant to anticipating otherwise unforeseen or unintended consequences. From the findings set out in this article, we can now elaborate by declaring that although accounting's most obvious

consequences are microeconomic, and it clearly has organisational, macroeconomic and distributional consequences, it also has many other potential consequences, which are not so obvious or straightforward but no less important. These additional consequences are broadly classifiable as socio-political, cultural and natural, but vary in detail according to identity, context and time.

Sixth, we advanced a diagram in S2 purporting to the relative positioning of the four paradigms induced by Burrell and Morgan (1979) (see Figure 1). The purpose of our alternative is to inspire the notion that all types of theory occupy some of the same territory, or in a maritime context, some of the same ocean; there is also plenty of ocean in which to sail one's canoe. The wide range of classes of consequences advanced in Figure 3 arises because the theoretical cases we bring into account in distinguishing a consequence are so wide. Moreover, most of the consequences are discernible from a subjectivist stance but not from an objectivist stance (cf. Solomons, 1991). Thus, researchers coming from the latter stance would probably have fewer classes, or at least a list of classes that represents a narrower range of consideration. We suggest these limits are greatest in what we label "Teleological theories: consequences of and for efficiency, effectiveness, and quality", which encompasses most research in accounting published in most other "ranked" academic journals. The dominance of theories and approaches associated with this area might be likened to how most I-Nikunau were largely satisfied to remain on Nikunau six and more generations ago, compared with those who took to seafaring and travelled around the Pacific and further afield. Are too many researchers limiting themselves by being satisfied to only cultivate their aba, and by accepting other limiting factors too (e.g., gerontocracy, performance rituals)?

We ask this question notwithstanding the increasing number of researchers going onto the reef of "political theories" to gather shellfish and octopus or to fish, and some fishing from their *te wa* (\cong traditional outrigger sailing canoe) in the nearby ocean of "institutional theories". It seems to us, however, that insufficient researchers are constructing *te báurua* (\cong traditional ocean-going canoe) intent on navigating the uncharted ocean of "cultural theories" for the adventure and rich insights and understandings undoubtedly to be discovered there. We hope our article may lead to further revision of such conceptions among those involved in accounting usages and inherently advantaged by them; and to greater cultural sensitivity and empathy on their part, and so to greater concern about social justice and making accounting more emancipatory (Lehman, 2013; Macintosh, 2009; McNicholas & Barrett, 2005; Roslender & Dillard, 2003). These matters are just as important in the Pacific studies literature as in the accounting literature; indeed, we anticipate bringing accounting to the attention of scholars and practitioners in that area, given how accounting usages are so important but are often accepted matter-of-factly and uncritically (cf. Suzuki, 2003).

Regarding further research, Tarawa, and Nikunau as well, exemplify a complex global issue as starkly as seems possible; this issue is sea level rise, and its attribution to carbon emissions, about which there has been a recent surge of accounting research. However, that research is concerned with how accounting may have contributed to the problems globally and how it might contribute to the global solutions, whereas the issue for residents of Tarawa and Nikunau seems to be where to migrate to, how and how soon (see *Kiribati – A call to the world*, 2009). Thus, it would be appropriate for these questions to be addressed in this research, as they are becoming a global issue and involve resources, decisions and accountabilities.

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Notes

- ¹ Nikunau is a reef island at the centre of the Pacific Ocean (coordinates 1° 21′ 0″ S, 176° 27′ 0″ E). It is among 16 islands forming the Kiribati (/¹kıribæs/) Archipelago—*Kiribati* is the local enunciation of *Gilberts*, the name arising from Captain Thomas Gilbert, who in 1788 sailed through the Kiribati Archipelago in command of a British East India Company ship.
- ² *I-Nikunau* and *Kain Nikunau* are words in *te taetae ni Kiribati*, the Austronesian-type language unique to and spoken (and increasingly written) across the Kiribati Archipelago. We use *I-Nikunau* (pronounced ee-Nikunau) to refer to the approximately 6,500 culturally homogeneous persons with indigenous ties to Nikunau; that is, of persons from Nikunau in a belonging sense, not merely a residential sense, or persons of Nikunau descent who identify with the island socially (the singular version is *te I-Nikunau*). *Kain Nikunau* has a similar meaning, although it may infer being normally resident on Nikunau.
- ³ Tarawa (or more precisely, South Tarawa) is the capital of the Republic of Kiribati, having carried on from being the headquarters of the British Colony of the Gilbert and Ellice Islands. The latter position in turn dates from the Battle of Tarawa in 1944, when the Allies expelled a short-lived Occupation by the Imperial Japanese Army. Banaba was the previous headquarters (1908-1941) and, before that, Tarawa and Butaritari (Maude & Doran, 1966).
- ⁴ The diasporic communities outside the Kiribati Islands invariably comprise all expatriate *I-Kiribati* in the vicinity, those with affinal ties to a community, and the next generation or two.
- ⁵ According to Maude (1963), a generation corresponds to about 25 years. In this article, notwithstanding that use of "generations" of ancestors is closer to *I-Nikunau* thinking, we shall use years for simplicity.
- ⁶ *Te mwaneaba* refers to a traditional political *cum* social *cum* religious meetinghouse. The six traditional *mwaneaba* on Nikunau date back a few centuries (Maude, 1963). Each was the centre for *I-Nikunau* in the vicinity; for example, those in the male line of *Te Utu* of Study and their marriage partners and offspring resided at the southern end of the island, close to *Te Atu ni Uea mwaneaba*, in one of the dozen or so *kainga* (≅ a scattered settlement/village) (Latouche, 1983). The inhabitants of these *kainga* constituted a gerontocratic polity, whose seat of government was *Te Atu ni Uea mwaneaba*. This arrangement applied to the rest of the island; the six *mwaneaba* districts were autonomous until the 1880s (Maude, 1960; Macdonald, 1971).
- ⁷ This reported visit to Nikunau led to some European maps labelling Nikunau as Byron's Island.
- ⁸ In drawing on Dixon and Gaffikin (2014) here and subsequently, we reiterate that the usages they covered relate to Kiribati as a whole; however, most of them apply somehow to *I-Nikunau*, although their importance for Nikunau has varied compared with other islands. The usages have figured in relations *I-Nikunau* have had with *I-Matang*, other *I-Kiribati* and a variety of other non-*I-Nikunau*. We relate them to various activities that non-*I-Nikunau* have initiated and *I-Nikunau* have become party to or by which they have been affected.
- ⁹ In effect, this exchange of copra for goods, which was still common on Nikunau in the 1980s, meant that copra *was* cash as far as most *I-Nikunau* were concerned; they used copra to make contributions to external bodies, be it as donations, fines, tax copra, school fees, licence fees, etc. Even today, *I-Nikunau* households on Nikunau generally do not have bank accounts and notes and coins from copra may only be in their possession for minutes or a few hours before being used to make purchases or whatever.
- ¹⁰ Although the status *Colony* did not arise formally until the approving of the Gilbert and Ellice Islands Order 1915, a de facto colony came into being probably more than a decade earlier (see Macdonald, 1982a).
- ¹¹ Initially part of a German Colony (as per Declaration between the Governments 1886), Nauru was administered by Australia from 1919 and never part of the Gilbert and Ellice Islands Colony.
- ¹² Uering was a member of *Te Utu* of Study. When *te unimane* in 1979, during a short visit to Tarawa, he recited his family's lineage back 17 generations (c. 1500) with numerous elaborations such as the place names of *kainga*, where they resided and whence partners came, and medical and agriculture knowledge and skills. This was written down in an exercise book by Aeren Tiare. The record comprises 24 pages: they can be construed as a transcribed example of the indigenous, oral form of accounting used on Nikunau. The accounts were maintained by *unimane* and concerned with the main "asset", ancestry, genealogy and kinship, as well as land, reef and ocean rights, and skills and rituals. Uering could also recite these details, including their location and history of ownership, but they do not appear in the transcription.
- ¹³ The contrast of "important countries/societies" and the rest was exemplified at the United Nations climate summit in Copenhagen in 2009; the Tuvalu delegation—Tuvalu is 500 km south of Nikunau and was known previously as the Ellice Islands—caused uproar when it objected to only "important countries" being consulted about a draft political declaration on climate (see British Broadcasting Corporation, 2009).