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Subalternity in Information Systems in Developing Countries A Critical Analysis of Ghana's TRADENET

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Abstract: In the search for explanations of contradictory effects and its disappointing outcomes in developing countries, Information Systems (IS) have been critiqued as pursuing techno-economic rationalities of western modernity with no recognition of alternatives. Development has also been critiqued as a western program promoted through discourses that do not admit local conditions and histories. Through critical discourse analysis (CDA) and a case study of Ghana's trade clearance system (TRADENET), we analyse how problematizations of IS in developing countries relate with local positions and contexts. We draw on the concepts of subalternity and hegemony to evaluate TRADENET's effects vis-à-vis its problematization by powerful actors. We find that TRADENET is contradicted by historically formed behaviors, culture and traditions that were unrecognized in technical problematizations of trade, development and IS. Despite importance of unrecognized, alternative or 'subaltern' positions in shaping IS in developing countries, they remain unrecognized in dominant or 'hegemonic' problematizations. Findings suggest that uncovering subaltern positions might illuminate 'blind spots' of IS in developing countries such as peculiar contradictory effects; and hence, inform better theory and practice.

Keywords: Information systems in developing countries (ISDC), critical theory, post-colonial theory, hegemony, subalternity, public reform, critical discourse analysis

1 Introduction

Information Systems (IS) transferred into developing countries have been noted as inconsistent with the local realities [1]–[3]. It has further been suggested that IS in developing countries (ISDC) is carried out under western universal positions with no recognition of alternative ways of perceiving it when deployed in historically formed contexts of developing countries [2]. Because of this, ISDC fail to make sense of alternative positions that might complicate or challenge its 'solutions', leading to observation that "the techno-economic rationality of western modernity is instrumental in defining a series of problems and determining their solutions [through IS] [but] is blatantly unsuccessful in streamlining people's behavior to the achievement of such solutions" [2, p. 2].

Development itself has long been critiqued for being western-centric and for promoting discourses that marginalize local cultures, histories and worldviews [4], [5]. In the development context, what is included or excluded as legitimate development "may depend on specific relations established in discourse; relations, for instance, between what experts say and what international politics allows as feasible" [5, p. 44]. E.g., problematizations of poverty in developing countries construct underdevelopment as a crisis that requires 'poverty-alleviating' western technical solutions [4], [5]. Escobar [5] shows how rather than advancing universal well-being, blanket application of western rationalities in the later parts of the twentieth century impeded capacity of the poor in developing countries to shape their own discourses and to sustainably better their lives.

Distinctiveness of ISDC lies in its attention to developing countries' context and problematization of the developmental role of IS [6, p. 140]. Yet, problematization of ISDC—the way 'development' is constructed through discourse and linked to technical IS solutions—rather than being objective or 'neutral', might be understood as an act of power that privileges some positions over others. Mobilization of resources and actors into networks that pursue particular technical solutions over others [7], [8] occurs through powerful development organizations, 'developed' country governments and elites in developing countries.

Against such backdrop, we explore how problematization of IS in developing countries relates with local positions and contexts. Through a critical discourse analysis (CDA) and case study, we examine how Ghana's TRADENET and its developmental effects were problematized through discourses; whether such discourses acknowledged

local positions and contexts of development and administration; and the implications. We contribute by highlighting how unattended positions and contexts (subalternity) might help explain problems like contradictory effects of IS in developing countries. Recognizing subalternity can also sensitize extant approaches to ISDC that pay insufficient attention to local positions, contexts and worldviews. The paper proceeds as follows: we elaborate our theoretical framing of power in discourses of ISDC through the conjoint concepts of hegemony and subalternity. We then present our research approach, case and analysis. A discussion and conclusion follows.

2 Theoretical background

2.1 ISDC problematization as hegemonic

IS are not neutral but have been shown to carry politics and ideology [9], context [10], policy [11] and to be shaped by specific rationalities [2], [12]. While a dominant rationality for IS draws from rational models e.g., technical economic rationalities, little is known of alternative positions and their implications in developing countries [2]. Gramsci's notion of hegemony helps explain the consenting, largely un-coerced acceptance within developing countries of dominant IS rationalities for development. Gramsci argued that a social group or class' ideas, interests or supremacy is exerted in two ways-coercion or 'domination' (dominio) and 'intellectual and moral leadership' (direzione intellettuale e morale) or hegemony (Gramsci's Il Risorgimento [13, p. 25]). Hegemony may involve ideologies of different groups that collectively express a way of seeing the world and a belief system that radiates from an elite group then becomes generally accepted as superior. Hegemony is the success of dominant groups in presenting their understanding of reality in a way that makes it not only accepted but viewed as common sense, the only 'proper' way. Alternate intellectual, moral, cultural perspectives are marginalized. We conceptualize ISDC as hegemonic because local actors often adopt its discourses as 'taken-for-granted' and common sense, thereby rejecting or de-emphasizing alternative realities. Although global institutions like the World Bank, International Monetary Fund (IMF), World Trade Organization (WTO), and multinationals that promote IS into developing countries exert power, ISDC phenomena are not sufficiently explained by theorizations of coercive power and politics in IS which assume control, authority, legitimization or pressure [14]-[16]. Granted that many development programs are tied up with binding conditionalities [17], [18], coercive institutional pressures alone do not explain willingness with which developing countries embrace western rationalities at the expense of alternatives.

2.2 Subalternity and ISDC

According to Gramsci, subalterns are outside hegemonic structures; groups without well-articulated historical narrative or ideology. Subaltern may be defined in juxtaposition to a power or economic 'elite' and subalternity created when the subaltern has "learnt to recognize himself not by properties and attributes of his own social being but by diminution, if not negation, of those of his superiors" [19, p. 8], much like Gramsci theorized that "the lower classes, historically on the defensive [against hegemony], can only achieve self-awareness via a series of negations" [20, p. 273]. But while subalterns view themselves in relation to the dominant, they "stand in an ambiguous relation to power; subordinate [...] but never fully consenting [...] never adopting the dominant point of view or vocabulary as expressive of its own identity" [21, p. 2194].

Being subaltern is equally about not having expression. To be subaltern is to be denied ability to speak directly for oneself without the re-presentation of others [22]. Hence without intervention of mediators like intellectuals and technical 'experts', subalterns, invariably, 'cannot speak' [22]. An implication is that subaltern positions remain 'shut out' and unable to contribute to discourses on development in developing countries. But if subalterns 'cannot speak', how are their positions expressed? Postcolonial studies document subaltern counter-discourses to hegemony. They include violent forms like armed resistance, terror and insurgency [23]; as well as nonviolent everyday means that are neither organized nor chronicled in "public transcript". These are "the ordinary weapons of relatively powerless groups: foot dragging, dissimulation, desertion, false compliance, pilfering, feigned ignorance, sabotage, and so on" [24]. Such "Everyday forms of resistance" often "make no headlines" and escape inquiry. Other means include constructing alternate narratives as well as informal relations and institutions [25]; constructing 'micro histories' [26]; deconstructing dominant narratives [27]; cohesion and communalism [28]. Subalternity manifests in different ways even if it "cannot speak" e.g., in the context of ISDC, it might manifest as conducive or subversive behaviors in relation to IS. Subalterns either descript IS faithfully if consistent with their position or enact differently if contradicting. Example of conducive manifestation of subalternity might be when local workers use native knowledge for IS innovation. Subversive manifestations might include manipulation, tampering and sabotage; resistance, rejection or circumventing; reliance on informal networks, social clicks or parallel channels instead of formal IS mediated processes; using micro narratives to counter technology, e.g.

'we are more effective without IS; technology slows us down'; using IS differently from its capabilities. Subversive positions therefore produce a 'parallel work world' at odds with ISDC.

In contrast to hegemonic positions of ISDC, subaltern positions may be situated (rather than planned), contextual (rather than universal), historically formed (rather than ahistorical), colloquial (rather than formalized), latent (rather than taken for granted), and often associated with less powerful, 'unrecognized' local actors (rather than powerful elites and organizations). Table 1 summarizes such hegemonic and subaltern relations in ISDC.

Table 1. Hegemonic versus subaltern positions of ISDC

Attribute in relation to ISDC	Hegemonic position	Subaltern position	
Rationality and action	Universal/a-contextual	Contextual	
Mode of phenomena	Planned	Situated	
Nature of change	Ahistorical	Historically formed	
Social or material articulation	Formal	Colloquial	
Relation to power	Centre/high	Periphery/low	
Direction of phenomena	Top-down/center-periphery	Bottom-up/local	
Typical manifestation	Taken for granted	Latent	
Relevant actors	Powerful elites e.g. international organizations, experts	'Unrecognized' less powerful actors e.g. local bureaucrats who use IS	

3 Research Approach

Our research combines two interrelated investigations. First, we uncovered dominant problematizations of Ghana's trade, development and TRADENET. Second, we conducted a case study of TRADENET to understand effects from point of view of users—local customs officers, declarants (freight forwarders, importers and exporters) and members of the trade community in Ghana. Our goal was to identify contradictions between problematizations and unrecognized local positions and contexts. Our case was purposively selected as typical of IS in developing countries that have unclear or contradictory developmental effects.

To unpack how trade and development were constructed through discourse as problems and linked to TRADENET as a solution, we employed critical discourse analysis (CDA). CDA enables investigation of how discourses relate to social change [29]–[31]. It examines use of language in speech and text to reveal assumptions and power dynamics [32] underlying social processes like organizing. Based on constructed corpus of key texts and text analogues, CDA links language of influential actors to claims and themes that materialize in specific change events. Data corpus consisted of World Bank project documents, reports by international organizations, government documents, audit reports, and documents from private technology and services providers (Table 2). Our case study employed data collected during eight months of field work in Ghana between 2015 and 2016. Research site was primarily Ghana Customs Division (GCD)'s office at Tema, Ghana's main port. Open-ended formal and informal interviews were conducted with 78 informants comprising customs officers, senior officials, declarants (freight forwarders, importers, exporters) and experts on Ghana's trade and development. Other data included notes from direct observations of TRADENET related operations among exporters, importers, freight forwarders and clearing agents; transcripts from stakeholder workshops; system demos and observations of port operations; archival reports, web contents, project artefacts; news clippings and public records.

Interviews probed customs practices, uses or non-uses of TRADENET. We focused on capturing several "voices", particularly those typically unrecognized in dominant discourses e.g., local artisans and street level bureaucrats. Interviews concluded when new insights ceased i.e., theoretical saturation had occurred [33]. Informants were drawn purposively and by snow-balling [34] with sensitivity to their position relative to power. Interviews were audio recorded, transcribed and analyzed—during and after the data collection phase—for key themes.

Table 2. Overview of data collection

Data corpus	Data collection site	Sources/contacts/ location	Data coverage	Dates of col- lection	Methodology/ analysis
World Bank documents covering GHATIG/TRADENET	Libraries, online websites, archives	Consultants and staff from World Bank, Accra/other	1998- 2005	2014	CDA

World Bank reports on trade, development, TRADENET	Libraries, online websites, archives	Consultants and staff from World Bank, Accra/other (correspondence)	1990s- 2015	2014	CDA
International organization documents on trade, trade facilitation e.g. WTO, WCO, OECD	Libraries, online websites, archives	Director, ministry of Trade and Industry, Accra; WCO officer, Geneva (corre- spondence)	1990s- 2015	2014	CDA
Regional protocols on trade and TRADENET	Libraries, online websites, archives	Director, ministry of Trade and Industry, Accra	2004- 2015	May- August, 2015	CDA
Customs guides, procedures and TRADENET documents	Libraries, online websites, archives	Customs officers, Tema	2004- 2015	May- August, 2015	CDA/ Case study/thematic analysis
GCNET documents and reports on TRADENET; notes from workshops on TRADENET	GCNET offices in Accra; other loca- tions in Accra	GCNET officers, Accra	2004- 2015	May- August, 2015	CDA/ Case study/thematic analysis
Other trade documents e.g. ports; shippers' guides	Tema Harbor	Head of IT, Tema Harbor	2004- 2015	May- August, 2015	CDA/ Case study/thematic analysis
Ghana National Develop- ment Plan (Poverty Re- duction Strategy (GPRS I&II) documents), Ghana Trade Policy	Government min- istries and agen- cies, Accra	Officers of Ghana Development Planning Commission (GDPC), Accra	2003- 2005; 2006- 2009	May- August, 2015	CDA/ Case study/thematic analysis
Ghana Export Promotion Authority (GEPA) reports	Government min- istries and agen- cies, Accra	Directors, GEPA offices in Accra	2012- 2014	May- August, 2015	CDA/ Case study/thematic analysis
Interview transcripts from interviews with 78 informants	Government min- istries and agen- cies, Accra; Tema Harbor, offices and other locations in and around Accra and Tema	Customs officers, government officials, declarants (freight forwarders, importers, exporters), DICs, GCNET staff, trade and policy experts, etc., Accra, Tema	1990s- 2015	May- August 2015; Febru- ary- May, 2016	Case study/the- matic analysis
Notes from 4 months of non-participant observa- tions of TRADENET re- lated activities	Tema Harbor	Customs officers, declarants, DIC inspectors and staff, Accra, Tema	2004- 2015	May- August, 2015	Case study/the- matic analysis
Expert reports and studies on TRADENET	Libraries, online websites, archives	Policy consultants, academics, IT consultants	2004- 2015	2014- 2016	Case study/the- matic analysis

4 Case

TRADENET, an electronic data interchange (EDI) was implemented to enable processing of trade clearance documents, duties, taxes and data. It was designed to automate processes and to support government of Ghana (GOG)'s revenue collections. As a business-to-government (B2G) platform, it was meant to integrate various public and private actors involved in trade. Prior to TRADENET, trade clearance and data flow was convoluted and involved replications and inefficiencies. Agencies required multiple documents that were not shared. Processes were paper-based, labor intensive, time consuming, costly and error-prone, requiring transcriptions and data entries. 13-30 stages were required, depending on the goods. This situation created opportunities for customs officers to demand bribes to 'speed up' for anxious declarants by e.g., allowing queue jumping, or manipulating processes. GoG suffered perennial revenue losses and customs, for several years, counted among Ghana's most corrupt organizations. TRADENET was intended to change this status quo with a 'single window' system whereby declarants had to submit one document—Import Declaration Form (IDF)—to fulfil all requirements.

4.1 Problematization of Ghana's Trade and Development

International trade has been juxtaposed as superior to aid in enabling developing countries overcome poverty; a view captured with the popular slogan 'trade not aid'. As such, international trade has been promoted by international organizations as a sure route to development. Ghana's trade and development prior to TRADENET was

problematized within what could be described as neoliberal discourses. Such discourses assumed discernible patterns of ideology, policies and programs, state form, and governmentality.

Ghana's neoliberal trade and development discourse has been dominated by an elite network of policymakers, government officials, and international technical experts. As an ideological position with coherent interpretations and worldview, such neoliberal positions are generally accepted, providing a kind of 'common sense'. 'Neoliberal common sense' governed not just ideas about international trade but also the role of the state, public administration and technology. E.g., neoliberal common sense drew from neoclassical economic theory to suggest that international trade based on competitive advantage is the best means to achieve economic growth, and with it, development. Developing countries like Ghana were to focus on advantages such as production of minerals and agricultural raw materials and to boost exports to international markets. Consequently, Ghana's developmental plans, as captured in plans and documents by government ministries and the Ghana National Development Planning Commission (GNDPC), focused on promoting traditional export commodities such as cocoa, bauxite, gold, timber as well as non-traditional exports such as cash crops like cashew, artisanal crafts etc.

Government of Ghana in conjunction with its development partners designed and pursued policies and programs aimed at strengthening Ghana's exports, improving international trade and enhancing revenue from trade-related activities. Neoliberal discourses on policy and programs focused on reforming 'frontline' trade-related government organizations such as customs, and wholly or partially privatizing key functions. Such policies and programs endorsed a particular form of state; Ghana was required by its development partners e.g., World Bank and IMF to pursue structural transformations to become competitive among trading states as far-flung as in East Asia and as close as neighbors, Ivory Coast and Nigeria. Structural transformations involved 'rolling back' or reconfiguration of state capacities and functions and increased reliance on private actors. E.g., TRADENET was developed by a private provider (SGS) and implemented along with reforms at customs that outsourced functions such as destination inspection, classification and valuation to private destination inspection companies (DICs).

Despite such limits on the roles of GoG and its agents, neoliberal discourses championed a kind of governmentality where government decentered to allow effective "governance at a distance" through use of technology and innovative public administration.² Rather than coercive power, such governance at a distance relied on the state's "infrastructural power" [35] and was enabled by information and knowledge production.³ Information and knowledge production, an intrinsic part of modern state administration enabled GoG to pursue its interests by control strategies such as quantification and revenue target setting, monitoring and management.

4.2 Problematization of Ghana's TRADENET

TRADENET was problematized as a technological solution to inefficient and ineffective trade processing in Ghana's trade administrations, especially customs, as part of broader global neoliberal push for increased international trade. Red tape, corruption and unlawful seizures of goods were deemed as great costs on businesses and governments. Thus, 'trade facilitation'—defined by the World Trade Organization (WTO) as "the simplification and harmonization of international trade procedures" [36]—took center stage since the mid-90s as a critical issue with development implications.

Administrative dysfunctions were said to put businesses at a competitive disadvantage, increasing costs of providing information and fulfilling compliance with authorities like customs, as well as indirect costs of delays and opportunity costs. According to United Nations Conference on Trade and Development (UNCTAD), trade facilitation was good for development because it increased transparency and trust, increased fiscal revenues for governments, made it easier for members of informal economies to enter the formal economy, improved effectiveness and efficiency e.g. automating simple tasks thereby freeing up customs officers to do value adding tasks. There were also pro-poor dimensions, it had been argued, which resulted from enabling small and medium-sized enter-

Neoliberalism has become a 'catch phrase' but remains contested [74]. Here, it suggests a collection of economic policies to reduce state intervention and promote laissez-faire capitalism or a 'free-market economy' as a means to economic efficiency, individual freedom and wellbeing. Such policies often aim to dismantle welfare or regulationist state interventions through means like privatization, deregulation, and lowered taxes for businesses and investors. There is also emphasis on free movement of capital, goods and services across state borders [75], [76].

Defining government as the 'conduct of conduct' [77], Foucault [78] develops the notion of governmentality to describe ways in which the state exercises control over, or governs the body of its populace.

Mann (1984) develops a conception of the institutional aspects of state power. Mann conceptualizes two types of power the state and its elites have –despotic power and infrastructural power. Infrastructural power is "the capacity of the state to penetrate civil society, and to implement logistically political decisions" (p.113). This is characteristic of the modern industrialized and capitalist state e.g., ability to tax incomes at source, without using physical coercion or getting consent.

prises as well as informal cross-border traders to easily comply with regulations. Trade facilitation was also introduced to improve living standards through enhanced state revenues.⁴ In principle, customs collections from trade was deemed important for developmental purposes such as infrastructure provision, providing public goods and services.

Discourses of problematization were produced through development 'consensus' by networks of technocrats who have similar western training e.g. in neoclassical economics and engineering; form a community of practice and often affiliated with powerful organizations such as World Bank, IMF, UN, WTO. Such discourses were further 'consumed' and reproduced by local government officials and elites in developing countries who might be western-trained or dependent on foreign expertise, aid and other support. Table 3 presents vignettes from our CDA.

Table 3. Illustrative findings from CDA

Discourse theme	Sub themes	Illustrative text
Trade and de- velopment		
Ideology of a powerful elites	 International trade key to development Economic growth based on exports and comparative advantage Globalization and external integration good for developing countries 	 The need for a radical transformation of Ghana's internal production and foreign trade is one of the most widely-shared beliefs among intelligent laymen, [] as well as the professional and political lenders. In the face of widening development opportunities [] this universal ideology informs the decision to re-focus policy [37, p. ii] Attainment of [] rapid growth rates require structural transformation of the productive sectors of the economy. Ghana needs to move away from a heavy dependence on exports of a limited number of primary commodities to create competitive advantage on a more diversified range of products with higher levels of value-addition. In international trade, competitive advantage is increasingly less a function of cost or price and more a function of quality, design and logistics management, leading to timely sales and after sales service [38, p. 4]
Policy and programs	Developing countries must structurally adjust and reform e.g. Reform 'front line' trade related institutions Private sector 'engine' of economic growth with government as enabler	 When the capacity of the public sector to manage the economy and deliver public services is weak, the prospects for development are poor. The public sector in many developing countries has been characterized by uneven revenue collection, poor expenditure control and management, a bloated and underpaid civil service, a large parastatal sector that provides poor returns on the scarce public funds invested in it, and weakness in the capacity of core agencies to design and implement policies that would address these problems [] [a situation that] progressively erodes the capacity of the state to provide economic and social services (World Bank, 1992,p.12) It is imperative that both the private sector and supporting public sector institutions understand and are able to respond to the demands and requirements of the marketplace. This necessitates policy interventions geared towards complementing rather than supplanting the market, as elaborated in the Ghana Trade Policy [38, p. 4]
State form	Reduce/'roll back' state in key areas by privatiz- ing functions	 Few government activities are more prone to corruption than customs and procurement. Some countries try to correct the mismanagement of their customs service by contracting it out to a wholly independent pri- vate enterprise [] private inspection and supervisory services can play a valuable role [39, p. 44]
Governmentality	Decentered government reliant on information, management controls	The basic strategy for modernizing customsis straightforward: establish transparent and simple rules and procedures [] and foster voluntary compliance by building a system of self-assessment buttressed by well-designed audit policies. Implementing this, however, requires addressing a range of issues, involving links with trade policy, organizational reform, the use of new technologies, the appropriate nature

African states, through their customs, collect 20 to 60 per cent of revenues as international trade-related duties, levies and taxes [79, p. 1]. E.g., Ghana's 2011 figure was nearly 40 percent, roughly equal all direct domestic tax receipts [80, p. 3].

TRADENET and customs		and extent of private sector involvement, designing incentive systems to overcome governance issues—and many others [40]
Modernization	 IT modernizes public sector i.e., promotes efficiency and effectiveness when used properly IT enables transformation of undesirable practices and shift to managerial rationalism Enhance state revenues by reducing corruption and 'leakages' 	 "The challenges of the 21st Century are placing massive demands on Customs administrations. Now, more than ever before, there is a need for Customs administrations to be more responsive. An understanding is required of issues such as globalization, the dynamics of international trade, the technicalities of the trade supply chain, emerging policy directions and the complexities of the global landscape" [41] "CEPS [later renamed GCD] is now ISO 9000 certified on its administrative procedures. The Gateway Project [TRADENET precursor] was able to reengineer the institution with a new mission and vision. As a result, the simplification of its procedures enabled Ghana to be recorded as one of the top ten reformers in the Africa in 2007 and 2008. The GCNet system for CEPS, it has enabled flow of information among institutions" [42, p. 29]

4.3 Contradictory local positions on trade and development

There is uneasy tension between promises of international trade and realities of Ghana's economic development. Ghana's Poverty Reduction Strategy (GPRS) laments that, "in the forty years since the days of Nkrumah [Ghana's independence leader], economic policy-making in Ghana has had to contend with a popular sense of grievance over an arrested national development still blocked by an unfair international trading system" [37, p. ii].

The promise of export-led growth remains a mirage for Ghana. Ghana's exports, mostly low value-added raw materials and agricultural products which employ majority of the country's labor, face disfavorable terms of trade, cascading tariffs, stiff international markets and abnormally high quality requirements whose net effects deter exports. Ghana's trade balance as of 2014 was negative, with \$4.62 billion in net imports, mostly high value-add goods from import sources like China, India and USA. During the five years prior to 2014, Ghana's imports outgrew its exports significantly, at an annualized rate of 13.7% compared to 9.8% [43].

Many exporters, importers and local manufacturers interviewed complained about worsening prospects in Ghana and the international economy that made their trade untenable. E.g., handicraft and garment exporters complained about cut-throat competition and counterfeiting from lower-cost countries like Vietnam and China; increasingly prohibitive regulatory and technical restrictions from main markets like the EU; and lack of financing facilities. Importers complained about hidden costs, intransparency, and excessive rent seeking (high duties and taxes, fees, bribes etc.,) on the part of government and customs officers who viewed them as source of 'easy' revenues. Local manufacturers such as furniture makers also complained about lack of government and policy support, excessive rent seeking, competition from cheap Chinese imports, and rising production costs (as they had to internalize noncore costs like utilities and access roads given deficits in government provisioning).

4.4 Contradictory effects of TRADENET

A decade after TRADENET was implemented, several administration dysfunctions it sought to transform persisted. Rent-seeking behaviors of customs officers such as bribery, extortion and corruption were reconfigured rather than eliminated [44]. While clearance practices improved, the system was not used as planned and was functioning below capability as a 'single window'. E.g., despite TRADENET's affordance to fully automate and integrate IDF processing, processes still involved redundant paper-based steps that required declarants to print out the electronic IDF and present to officers face-to-face. The face-to-face opportunities created by such paper submissions could be viewed as attempts by officers to re-intermediate the now automated and integrated process that had physically disintermediated them by design. Several officers interviewed complained about diminished influence of customs and 'loss of control' to outsourced private companies such as Destination Inspection Companies (DICs) that performed previously core customs functions like valuations and classification.

The resulting mode of IDF processing at GCD, rather than fully reflecting planned capabilities of TRADENET, maintained aspects of pre-TRADENET manual clearance procedures that took place in the 'long room'. Prior to IT automation at GCD, the 'long room' was where customs clearance occurred. It was a hallway where officers sat behind adjoining glass- partitions (multi-windows) to interact with declarants and process declarations. Long room process was tightly coupled with various interdependent steps and hence highly prone to errors and inefficiencies as well as officers' coercion and discretion. Furthermore, at various stages, the IDF was prone to tampering and falsification to evade taxes and duties.

Despite such known limitations of manual, paper-based steps, many officers preferred paper-based to full electronic IDF processing. This contradiction had no obvious justification and was puzzling to senior officials who unsuccessfully encouraged officers to use TRADENET fully. As one administrator lamented, "customs officers have so much confidence in paper [...] you don't need the physical receipt but they still want to see it."

The issue of corruption at customs was indirectly explored in our research through narratives of declarants and informal discussions with bureaucrats. Corruption was found to involve both formal, state-sanctioned practices and informal private practices such as bribery, extortion or pilfering. Corruption remained a topical issue in Ghana and most Ghanaians perceived the government and bureaucrats as corrupt [45].

In the formal sense, a consequence of several GoG agencies mandated in customs clearance by law was that such agencies charged rents like 'inspection fees' or 'levies' autonomously and without coordination. The Ghana Museums and Monuments Board (GMMB), for example, were to charge handicraft exporters 50 Ghana pesewas per item, 5 to issue supporting documents to an IDF. 6 Such practices caused tensions between traders who felt extorted from, and bureaucrats who failed to acknowledge that various 'small fees' created burdensome hidden costs (the author witnessed a verbal feud between traders and bureaucrats at a TRADENET workshop). GoG-sanctioned rent-seeking did not only have historical roots, but were also attributable to perennial budget deficits and poor public finance which meant that under-funded agencies were pressured to generate funds.

Aside such issues, various traditional and cultural behaviors undermined Ghana's TRADENET e.g., local lackadaisical attitudes towards time and time management naturally undermined western-assumptions underlying automation and efficient clearance. This was captured by a local pidgin phrase "go and come, go and come" that many declarants complained about as the typical perfunctory response from customs and other bureaucrats whenever declarants made critical enquiries. During fieldwork, it was common for customs officers and government officials to repeatedly miss or be extremely late for various pre-scheduled appointments and meetings; a fixture of life in Ghana that ordinary Ghanaians have come to take for granted.

Table 4. Summary of findings

Area of discourse	CDA findings (on problematization)	Fieldwork findings (on loocal positions)	Implications
Trade and development	International trade key to development Economic growth based on exports and comparative advantage Private sector 'engine' of economic growth Government as enabler of private sector	 Unfavorable international trade climate for developing countries Many developing countries like Ghana are net importers given lack of industrial base for manufacturing, among other reasons. Import substitution discredited in dominant discourses. Ghana is market/ 'dumping' ground for imports and international trade stifles domestic industrialization Government rent seeking, lack of public infrastructure and favorable policy intervention stifles private sector development 	 International trade-driven development questionable in practice. Net effects of international trade on Ghana's development debatable Alternative policy and practical options inhibited 'Non-technical' 'solution' e.g. behavioral change; and long term fundamental transformations unexplored
IT and public administration rationalization	 IT modernizes public sector i.e., promotes efficiency and effectiveness IT enables transformation of undesirable bureaucratic practices and shift to managerial rationalism 	 Personalization of public office i.e. neopatrimonialism, means that formal rules are subject to negotiation Historically formed behaviors such as rent-seeking and corruption materialized through paper processing Cultural and traditional behaviors e.g. subjective notions of time and informal interactions inimical to goals of TRADENET 	Contradictory effects of IT e.g., persistence of paper use ("fetishization of paper") and historically formed behaviors

⁵ 50 pesewas, or about 13 US cents as of October 2015. E.g., a cargo container with 1000 woodcarvings would cost an exporter 1000*0.13, or \$130 for 'inspection fees' to one of several agencies in charge of regulating woodcarvings. These payments were not 'official', meaning while legal, they were not payments collected by GCD into national treasury.

⁶ In the example of GMMB, the document was to confirm that export-bound items were not national relics. Handicraft exporters complained against such inspection because they dealt in new decorative artefacts.

5 Discussion

5.1 Subaltern positions on Ghana's Trade and Development

Our findings indicate that the neoliberal problematizations of trade and development as well as TRADENET were frequently at odds with local realities or ignored context and history. Indeed, political structures and institutional arrangements governing neoliberal international trade remain intransparent, disfavorable to developing countries, and often inimical to socioeconomic development [46]–[49]. It has been pointed out that the promise of neoliberal reforms to deliver developmental outcomes for developing countries remains dubious [48], [50], [51]. E.g., policies of powerful international trade actors like the WTO have been said to limit the options of developing country governments thereby shrinking not only their "development space" but also "self-determination space" [49]. Based on observation that export is not a principal source of economic growth, it has been argued that developing country economies should follow "internal integration" rather than "external integration" [49, p. 635]. Developing countries like Ghana might be well of building up regional-level organizations and embedding their markets not only nationally but also in regionally distinct configurations that provide tailored policy solutions for vulnerabilities of different countries and regions [49, p. 638]. Nonetheless, neoliberal discourses of influential organizations like WTO, and contemporary development theory generally hold that comparative advantage and international trade are to be preferred to alternatives such as import substitution or regional trade, no matter how appropriate they might be in particular contexts.

5.2 Subaltern positions on TRADENET enabled administration modernization

Contradictory outcome of TRADENET postimplementation such as the 'fetishization of paper' as well as corruption, bribery and rent-seeking behaviors might be best understood through a historical and contextual lens that considers institutional peculiarities of customs administration. Considering these and their underlying power dynamics illuminates subaltern positions in relation to IS use and effects. E.g., contrary to principles of Weberian bureaucracy, in administrations around the world, particularly in developing countries such as Ghana, decision-making rarely emanates from rational-legal authority but is subject to negotiation [52, p. 5].

In Africa, neopatrimonialism has been widely used to describe public administration [53]–[55]. It is defined as organization in which "relationships of a broadly patrimonial type pervade an administrative system which is formally constructed on rational-legal lines" and where officers hold "powers which are formally defined, but exercise those powers [...] as a form [...] of private property" [56, p. 48]. It has been further claimed that neopatrimonialism distinguishes African institutions from others [57], [58], and the argument has been made that "the distinctive institutional hallmark of African regimes is neopatrimonialism" [59, p. 277].

In the African context, separation between private and public spheres—the basis of modern state and public administration—is said to be thin or non-existent [60]. Such blurring has deep cultural and historical roots. E.g., local ideas of administration and work are personalized in fundamental ways: from subjective notions of time, to modes of accountability, interaction and (in)formality. The term 'African time' has come to characterize a cultural tendency in African societies to keep a relaxed, slow-paced, nonchalant attitude toward time [61], [62].

Such historically and culturally formed behaviors further sustained rent-seeking. Rent seeking elaborates another important aspect of the political economy of Africa's underdevelopment (Mbaku, 1998; Herbst, 2000; Mkandawire, 2013). Rents occur when non-market forces such as politics or corruption, distort mechanisms of a free market and arise from "politically mediated opportunities for obtaining wealth through non-productive economic activity" [66, p. 427]. Lewis [67, p. 438] similarly notes a "mutually reinforcing pattern of neopatrimonial governance and a rentier economy." Neopatrimonialism and rent seeking are underpinned by informal structures where formal ones might exist.

Rent-seeking and corruption at Ghana's customs could be viewed in broader historical context from the organization's inception over 150 years ago when the country was a colony of Britain [68], [69]. Early customs enforced collections of taxes and duties in line with Britain's doctrine of self-sufficiency of colonies, whereby Africans had

We take a relaxed view of subaltern positions that is limited within contemporary global structures like capitalism. A more radical interpretation might reject any 'western' structures and discourses as a starting point. E.g. scholars have investigated if developing countries like those in Africa had/have indigenous/non-western administrations or rationalities [81], [82].

^{4 &#}x27;Integration' often implies integration into the world economy, with an assumption that more integration is always developmental. Wade [48, p. 635] argues an internally integrated economy has better developmental thrust since it has dense input—output linkages, and a structure such that a high proportion of domestic production is sold to domestic wage earners.

⁹ It has been suggested that despite import substitution going awry in Latin America, Africa, South Asia etc., this no more discredits it as a principle than the failures of democracy discredits the principle of democracy [49, p. 234]. Policy response might be to do import replacement better, not less [83].

to finance their own domination to lower the cost of imperialism to Britain's treasury [70], [71]. Given that direct taxation on colonial subjects was prone to rebellion and was extremely costly for overstretched colonial administrations, indirect trade rents were preferable [72]. Peculiar patterns established by colonial administrators were adopted by post-colonial countries after independence [70], [73]. Reliance on customs as a major and preferred channel for extractive rents outlasted the colonial period and continued into modern Ghana.

6 Conclusion

The dominant problematizations of Ghana's TRADENET— (1) international trade as solution to poverty and under-development (2) IS-enabled customs administration rationalization as a technical solution to dysfunctions of traditional administration that impede efficient international trade—do not consider historically shaped local positions and contexts that contradict their appropriateness. As a net importer, Ghana derives less direct benefit from the promise of export-led economic growth through international trade facilitated by TRADENET. The government rather views the primary benefit of TRADENET as the efficient collection of rents in the form of taxes, fines and fees. Similarly, administration modernization potential of TRADENET is impeded by neopatrimonial rent-seeking behaviors like bribery, extortion, corruption etc., and institutionalized practices like "African time" constituted through informal face-to-face negotiations and materiality of paper.

Historical and ongoing power relations and their manifestation through discourse are important for uncovering biases of development and its interventions [4], [5]. Such perspective is useful for critically assessing implications of IS in developing countries. E.g., by problematizing development in technical rational terms that require programmatic interventions, development discourse conveniently neglects history, politics, traditions and other 'messy' phenomena it has no obvious explanations for, nor ready 'solutions' to [4]. Furthermore, development discourse marginalizes local positions not only through political and economic power, but also through intellectual and moral leadership or hegemony. These clarify why alternative positions to IS remain unrecognized and underexplored while universalist positions dominate despite their inadequacy in situated contexts [1], [2].

Subalternity is not merely about marginalization but also the extent to which subalterns 'speak for themselves' or own their discourse without re-presentation of others [22]. Our contribution is to show how it provides a fresh window into understanding 'wicked' ISDC problems that sociotechnical accounts struggle against such as our 'fetishization of paper' example. Recognizing subalternity in ISDC offers emancipation by negotiating values and objectives of IS with positions and contexts of developing countries. A methodological implication is that ISDC should venture beyond typical case studies with technical rational assumptions. Ethnographic and anthropological methods might hold promise for uncovering subaltern perspectives in relation to ISDC.

7 References

- [1] C. Avgerou, *Information Systems and Global Diversity*. Oxford University Press, 2002.
- [2] C. Avgerou, "Recognising Alternative Rationalities in the Deployment of Information Systems," *Electron. J. Inf. Syst. Dev. Ctries.*, vol. 3, no. 7, pp. 1–15, 2000.
- [3] R. Heeks, "Most E-Government for Development Projects Fail: How Can Risks be Reduced?," Manchester, 14, 2003.
- [4] J. Ferguson, *The Anti-Politics Machine: Development, Depoliticization and Bureaucratic Power in Lesotho*. Cambridge: Cambridge University Press, 1990.
- [5] A. Escobar, Encountering Development: The Making and Unmaking of the Third World. Princeton University Press, 1995.
- [6] C. Avgerou, "Information systems in developing countries: a critical research review," *J. Inf. Technol.*, vol. 23, no. 3, pp. 133–146, Jun. 2008.
- [7] M. Callon, "Some elements in the sociology of translation: domestication of the scallops and the fishermen of St. Brieuc Bay," in *Power*, *action and Belief: A New Sociology of Knowledge*, J. Law, Ed. London: Routledge, 1986, pp. 196–223.
- [8] B. Latour, "Technology is Society Made Durable," in *Sociology of Monsters? Essays on Power, Technology and Domination, Sociological Review Monograph*, London: Routledge, 1991, pp. 103–131.
- [9] I. Gagliardone, "A Country in Order': Technopolitics, Nation Building, and the Development of ICT in Ethiopia," *Inf. Technol. Int. Dev.*, vol. 10, no. 1, pp. 3–19, 2014.
- [10] R. Heeks, "E-Government as a Carrier of Context," J. Public Policy, vol. 25, no. 1, pp. 51–74, 2005.
- [11] A. Cordella and F. Iannacci, "Information systems in the public sector: The e-Government enactment framework," *J. Strateg. Inf. Syst.*, vol. 19, no. 1, pp. 52–66, 2010.
- [12] C. Avgerou and K. McGrath, "Power, Rationality and the Art of Living through Socio-technical Change," *MIS Q.*, vol. 31, pp. 295–315, 2007.

- [13] J. Femia, Gramsci's political thought: hegemony, consciousness and the revolutionary process. Oxford: Clarendon, 1987.
- [14] J. (Sean) Jasperson, T. a. Carte, C. S. Saunders, B. S. Butler, H. J. P. Croes, and W. Zheng, "Review: Power and Information Technology Research: A Metatriangulation Review," *MIS Q.*, vol. 26, no. 4, p. 397, Dec. 2002.
- [15] L. Silva, "Power and politics in the adoption of information systems by organisations: The case of a research centre in Latin America," 1997.
- [16] M. L. Markus, "Power, Politics, and MIS Implementation," Commun. ACM, vol. 26, no. 6, pp. 430–444, 1983.
- [17] C. Santiso, "Good Governance and Aid Effectiveness: The World Bank and Conditionality," *Georg. Public Policy Rev.*, vol. 7, no. 1, pp. 1–22, 2001.
- [18] D. Kapur and R. Webb, "Governance-related Conditionalities of the International Financial Institutions," in *G-24 Discussion Paper Series Research papers for the Intergovernmental Group of Twenty-Four*, 2000, no. 6.
- [19] R. Guha, "On Some Aspects of the Historiography of Colonial India," in *Subaltern Studies*, Oxford: Oxford University Press, 1982.
- [20] A. Gramsci, Selections from the Prison Notebooks. New York: International Publishers, 1971.
- [21] V. Leitch, "Gayatri Chakravorty Spivak," in Norton Anthology of Theory and Criticism, V. Leitch, Ed. 2010.
- [22] G. Spivak, "Can the subaltern speak?," in *Marxism and the Interpretation of Culture*, C. Nelso and L. Grossberg, Eds. London, UK: Macmillan, 1988, pp. 271–313.
- [23] J. Scott, "Revolution in the Revolution: Peasants and Commissars," *Theory Soc.*, vol. 7, no. 1, pp. 97–134, 1979.
- [24] J. Scott, Weapons of the Weak: Everyday Forms of Peasant Resistance. New Haven: Yale University Press, 1985.
- [25] R. Guha, Elementary Aspects of Peasant Insurgency In Colonial India. Oxford: Oxford University Press, 1983.
- [26] G. Prakash, "Writing Post-Orientalist Histories of the Third World: Perspectives from Indian Historiography," *Comp. Stud. Soc. Hist.*, vol. 32, no. 2, p. 383, 1990.
- [27] G. Spivak, "Selected Subaltern Studies," in *Subaltern Studies: Deconstructing Historiography*, R. Guha and G. Spivak, Eds. Oxford: Oxford University Press, 1988.
- [28] G. Pandey, The Construction of Communalism in Colonial North India. Oxford University Press, 2006.
- [29] L. Chouliaraki and N. Fairclough, "Critical Discourse Analysis in Organizational Studies: Towards an Integrationist Methodology," *J. Manag. Stud.*, vol. 47, no. 6, pp. 1213–1218, 2010.
- [30] N. Fairclough, Critical Discourse Analysis: the Critical Study of Language. Harlow: Longman, 2010.
- [31] N. Fairclough, Analysing Discourse: Textual Analysis for Social Research. Abingdon, Oxon: Routledge, 2003.
- [32] N. Fairclough, Language and Power. London: Longman, 1989.
- [33] K. Eisenhardt, "Building Theories from Case Study Research.," Academy of Management Review, vol. 14. pp. 532–550, 1989.
- [34] A. Bryman, Social research methods. New York, NY: New York University Press, 2001.
- [35] M. Mann, "The Autonomous Power of the State: Its Origins, Mechanisms and Results," Eur. J. Sociol., 1984.
- [36] WTO, "WTO: A Training Package; What Is Trade Facilitation?," Geneva, 1998.
- [37] Ghana National Development Planning Commission, "Growth and Poverty Reduction Strategy (GPRS I & II)," Accra, 2007.
- [38] Ministry of Trade and Industry, "Ghana Trade Policy," Accra, 2005.
- [39] World Bank Group, Governance and Development. Washington DC: The World Bank Group, 1992.
- [40] T. Ter-Minassian, "Changing Customs: Challenges and Strategies for the Reform of Customs Administration," M. Keen and M. Mansour, Eds. Washington, DC: International Monetary Fund (IMF), 2003.
- [41] P. Gordhan, "Customs in the 21st Century," World Cust. J., vol. 1, no. 1, pp. 49–54, 2007.
- [42] World Bank Group, "Implementation, Completion and Results Report: Ghana Trade and Investment Gateway Project (GHATIG)," Washington, DC, 2010.
- [43] OEC, "The Observations of Economic Complexity (OEC): Ghana," 2016. [Online]. Available: http://atlas.media.mit.edu/en/profile/country/gha/. [Accessed: 24-Oct-2016].
- [44] A. Addo, "Explaining 'Irrationalities' of IT-Enabled Change in a Developing Country Bureaucracy: The Case of Ghana's TRADENET," *Electron. J. Inf. Systems Dev. Ctries.*, vol. 77, pp. 1–22, 2016.
- [45] Afrobarometer, "Ghana Report," *Afrobarometer: An African-led series of national public attitude surveys on democracy and governance in Africa*, 2014. [Online]. Available: http://www.afrobarometer.org/countries/ghana-1. [Accessed: 17-Oct-2015].
- [46] W. Easterly, "How the Millennium Development Goals are Unfair to Africa," *World Dev.*, vol. 37, no. 1, pp. 26–35, 2009.
- [47] C. Gore, "The rise and fall of the Washington Consensus as a paradigm for developing countries," *World Dev.*, vol. 28, no. 5, pp. 789–804, 2000.
- [48] R. H. Wade, "Is globalization reducing poverty and inequality?," World Dev., vol. 32, no. 4, pp. 567–589, 2004.
- [49] R. H. Wade, "What strategies are viable for developing countries today? The World Trade Organization and the shrinking of 'development space," *Rev. Int. Polit. Econ.*, vol. 10, no. 4, pp. 621–644, 2003.

- [50] H.-J. Chang, Rethinking Development Economics. London: Anthem Press, 2003.
- [51] H.-J. Chang, 23 Things they don't tell you about capitalism. Bloomsbury Press, 2010.
- [52] M. Minogue, "The Internationalization of New Public Management," in *The Internationalization of Public Management: Reinventing the Third World State*, W. McCourt and M. Minogue, Eds. Cheltenham, UK: Edward Elgar Publishing Ltd, 2001, pp. 1–19.
- [53] P. Chabal and J. Daloz, *Africa Works. Disorder as Political Instrument*. Bloomington, IN: Indiana University Press, 1999.
- [54] M. Bratton and N. Van de Walle, "Neopatrimonial Regimes and Political Transitions in Africa," *World Polit.*, vol. 46, no. 4, pp. 453–489, 1994.
- [55] N. Van de Walle, *African Economies and the Politics of Permanent Crisis*. Cambridge, UK: Cambridge University Press, 2001.
- [56] C. Clapham, Third World Politics: An Introduction. University of Wisconsin Press, 1985.
- [57] J. Medard, "The Underdeveloped State in Tropical Africa: Political Clientelism or Neo-patrimonialism?," in *Private Patronage and Public Power: Political Clientelism and the Modern State*, C. Clapham, Ed. New York: St. Martin's Press, 1982, pp. 162–192.
- [58] P. Englebert, State Legitimacy and Development in Africa. Boulder, CO: Lynne Rienner, 2000.
- [59] M. Bratton and N. Van de Walle, *Democratic Experiments in Africa: Regime Transitions in Comparative Perspective*. Cambridge University Press, 1997.
- [60] C. von Soest, "How Does Neopatrimonialism Affect the African State? The Case of Tax Collection in Zambia," Hamburg, 32, 2006.
- [61] A. Howes, P. Grimes, A. L. Lopez, P. G. Esteban, M. Shohel, M. C., D. Neff, and A. Ramsden, "PhD fieldwork in developing countries The issue of time," in *BAICE Conference 2006: Diversity and Inclusion*, 2006.
- [62] R. Rosaldo, Culture & Truth: the remaking of social analysis. London: Routledge, 1993.
- [63] T. Mkandawire, "Neopatrimonialism and the political economy of Economic Permormance in Africa: Critical Reflections," 2013.
- [64] J. Mbaku, "Corruption and Rent-Seeking," in *The Political Dimension of Economic Growth*, S. Borner and M. Paldam, Eds. London: Macmillan, 1998, pp. 191–211.
- [65] J. Herbst, *States and Power in Africa: Comparative Lessons in Authority and Control*. Princeton: Princeton University Press, 2000.
- [66] C. Boone, "The Making of a Rentier Class: Wealth Accumulation and Political Control in Senegal," *J. Dev. Stud.*, vol. 26, pp. 425–449, 1990.
- [67] P. Lewis, "Role of Government in the Economy and the Role of Rent-Seeking in African Political Economies: Introduction," *World Dev.*, vol. 22, no. 3, pp. 423–425, 1994.
- [68] Ghana Customs, "Customs Excise and Preventive Services," 2006. [Online]. Available: http://ghanadistricts.com/districts/?news&r=8&_=100. [Accessed: 05-Jan-2016].
- [69] B. Chalfin, *Neoliberal Frontier*. Chicago: The University of Chicago Press, 2010.
- [70] L. Gardner, Taxing Colonial Africa: The Political Economy of British Imperialism. Oxford University Press, 2012.
- [71] C. Young, *The African Colonial State in Comparative Perspective*. New Haven and London: Yale University Press, 1994.
- [72] M. Waijenburg, "Financing the African Colonial State: The Revenue Imperative and Forced Labour," 2015.
- [73] D. Acemoglu, S. Johnson, and J. A. Robinson, "Institutions as a Fundamental Cause of Long-Run Growth," in *Handbook of Economic Growth*, vol. 1, no. 5, P. Aghion and S. N. Durlauf, Eds. Elsevier B.V., 2005.
- [74] T. C. Boas and J. Gans-Morse, "Neoliberalism: From new liberal philosophy to anti-liberal slogan," *Stud. Comp. Int. Dev.*, vol. 44, no. 2, pp. 137–161, 2009.
- [75] D. Harvey, A Brief History of Neoliberalism. New York: Oxford University Press, 2005.
- [76] D. M. Kotz, "Globalization and Neoliberalism," *Rethink. Marx.*, vol. 14, no. 2, pp. 64–79, 2002.
- [77] M. Foucault, "The Subject and the Power," in *Michel Foucault: Beyond Structuralism and Hermeneutics*, H. Dreyfus and P. Rabinow, Eds. Brighton: Harvester, 1982, pp. 208–226.
- [78] M. Foucault, "Governmentality," in *The Foucault Effect: Studies in Governmentality*, G. Burchell, C. Gordon, and P. Miller, Eds. Chicago, IL: University of Chicago Press, 1991, pp. 87–104.
- [79] T. Cantens, "Is it Possible to Reform a Customs Administration? The Role of the Customs Elite on the Reform Process in Cameroon," 2012.
- [80] Bank of Ghana, "Monetary Policy Report: Fiscal Developments," Financ. Stab. Rep., vol. 2, no. 1, 2012.
- [81] M. Stout, L. Amoah, and L. Howe, "Public Policy Formation in Africa: Toward a Grounded Ontology," *Adm. Theory Prax.*, vol. 32, no. 4, pp. 606–609, 2010.
- [82] L. Amoah, "Constructing a New Public Administration in Africa," *Adm. Theory Prax.*, vol. 34, no. 3, pp. 385–406, Sep. 2012.
- [83] H. Bruton, "A reconsideration of import substitution," J. Econ. Lit., vol. 36, no. 2, 1998.