'VIPsm', A THREAT TO SOCIAL STABILITY IN SOUTH AFRICA: FROM APARTHEID EXCLUSIONS TO DEMOCRATIZED INEQUALITIES

Mashele RAPATSA

Faculty of Management and Law, University of Limpopo, South Africa.
LLB (UL) LLM (UCT), PhD student University of Groningen, the Netherlands.

Abstract

The object of this article is to present a critical analysis of the impact of the notion of 'VIPsm', a phenomenon through which human beings are socially 'categorized' or 'classed' according to status or wealth or position being held in society. The article is predicated on South Africa's discernible constitutional pursuit of attaining social stability and equitable social justice. This work is also considerate of the country's known unpleasant history of apartheid's acute race-based social exclusions, and in contrast, the post 1994 persistent social and economic inequalities which thus far proliferates material disadvantage, poverty, social discontent and protests amongst citizens. The article employed 'Transformational Leadership theory 'and 'Power and Influence theories' as tools of analysis, given that the Constitution, 1996 is transformative in nature and thus require 'transformational leaders' in order to achieve its major goal of burying wounds of the past, to build one unified nation that is socially stable. It is asserted that social challenges and superfluous differential treatment of humans besieging contemporary South Africa are suggestive of the presence of leadership that is self-centered, opulence driven, and has little or no regard for the poor and thus, disfavor the solidarity principle.

Keywords:VIPsm,inequalities, social transformation, social stability, power and leadership

1. Introduction

> *"As soon as politicians start climbing up the ladder, they suddenly become kings… republics came to the world to make sure that no one is more 'important' than anyone else. '…You need a palace, red carpet, a lot of people behind you saying, 'Yes, sir.' I think all of that is awful".*- José Mujica

'VIPsm',[1]as an epitome of privilege and social exclusivity, has tremendously entrenched itself at the core of every sphere of social, political, legal and economic interaction among South Africans.It has even infiltrated the state's normative value system, where legal norms have been invented to justify opulent expenditures by the political leadership and the ruling elite. For instance, something called a 'ministerial handbook' is always cited to justify exorbitant expenditures on head of state, cabinet ministers and other state functionaries, while majority of electorates lack social security, languishing in poverty. Distressingly, the country is infamous for apartheid's unpleasant history of social and economic exclusions under which

---

[1]
VIPsm is a term the author formulated from a trending phenomenon of "*Very Important Person(s)– VIP(s)*". This article coins the notion of 'VIPsm' as a theory of categorizing or classing human beings according to status or wealth or positions they occupy in society. It is particularly rife among political parties, and in government where political leaders or state functionaries/officials demand extra-specialtreatment and recognition by virtue of position, wealth or status, rather than their contribution towards serving humanity. It is as though voters 'worship' those voted into power.

Mashele Rapatsa, 'Vipsm', A Threat To Social Stability In South Africa: From Apartheid Exclusions To Democratized Inequalities

10.1515/eras-2016-0006

people's social security were determined on racial basis. For instance, racial inequalities manifested immensely on matters of access to quality education, which were deliberately meant to render pupils from proletariat and indigent African communities irrelevant and thus non-competitive in every sphere of life (Lemon, 2004:269). Fundamentally, this created immense social instabilities and lack of social cohesion. And, such legacy still lives on and will ostensibly take decades to be eradicated. These said, social inequalities, socio-economic deprivations and pervasive material disadvantages still characterizes the country's prime challenges that are at the center of retarded social development, lack of social peace and realization of social justice. It is trite that these phenomena were deliberately entrenched by the apartheid system, butstill remain of widespread prevalence after twenty-two years into democratic dispensation. Apartheidinstitutionalized social exclusions and acute inequalities through labour laws and highly unequal investments in services for different racial groups (Sanders & Chopra, 2006:73; Klotz, 1995:451). In simple terms, the system invested more on creating and proliferating poverty by subjecting disadvantaged groups to deliberate social and economic exclusions.

Therefore, it goes without saying that the post 1994 dispensation inadvertently inherited the duty to eradicate such historic deprivations, with the Constitution of the Republic (*hereinafter, the Constitution, 1996*), enjoining the state to commit towards achieving a new culture that pursues an agenda of transformation in social, legal, political and economic realities. But the incessant presence of these challenges inhibits the state's capacity to meaningfully fulfill the constitutional context of developmental values that are transformation based, in order to bury wounds of the past and create a united nation. It is for this reason that there is a need to challenge emerging trends which the political leadership have normalized using 'power and influence', while in public office, effectively inventing new perilous meanings regarding leadership and social relations among a people. This can best be tested by analyzing the notion of VIPsm, which thrives particularly at the hands of the leadership in government and the ruling elite that controls the means of production.

2. Problem statement

Government's annual expenditure on VIP protection constantly keep escalating into billions, whilst the recent past reveals that South Africa has been inundated with multiplicity of social disruptions manifesting predominantly in the form of (violent) service delivery protests. This has been particularly rampant in villages, townships and other communities where underdevelopment and material disadvantage are widespread. Such violent protests have also permeated university campuses across the country, with students running a *#FeesMustFall* campaign, in demand for free education.Often these protests are a symbol of desperation owing to diminished opportunities and social discontent resulting from unfulfilled promises by the political leadership, a phenomenon which Bass and Steidlmeier (1999:186) would associate with pseudo-transformational leaders who are generally unethical, manipulative and deceptive, whilst using state power for self-flattery.

Several studies have identified three main socio-economic challenges, inclusive of poverty, inequalities and declining employment prospects as the primary forces behindsocial instabilities. Notwithstanding the presence of social security programmes, poverty remains high (Taylor, 2002; Armstrong et al, 2008:8-12; Patel, 2012:107; Frye, 2013:2 & 2014; Lehohla, 2014:12; Hall et al, 2016:6), inequalities have worsened and keep spiraling (Woolard, 2002:6; Appolis & McKinley, 2009:1; Mattes, 2012:140), in the midst of declining employment prospects (Lehohla, 2016). These phenomena breed social discontent, especially when the political leadership flaunts wealth, exclusive better life and leads lavish lifestyles to

Mashele Rapatsa, 'Vipsm', A Threat To Social Stability In South Africa: From Apartheid Exclusions To Democratized Inequalities

10.1515/eras-2016-0006

fulfill VIPsm egos.

3. Rationale and Research Approach

This article is concerned with the notion of VIPsm, a phenomenon that has crept into every sphere of social lives of political leadership, andof course the private sector in their interaction with members of the proletariat communities. VIPsm is inherently impacting and disorientating social stability in a variety of ways, especially because it creates perceptions regarding legitimate power and influence. To achieve social stability and social justice, society yearns for selfless-leadership that embraces ethos of humanitarianism, which Buchanan-Smith & Cosgrave (2013:13) accentuates is concerned with securing livelihoods, and serving the populace better, indiscriminately and in a sustainable manner. Hence, this article laments the fact that essential basic services needed for the survival and sustenance of humanity have inherently been reduced into instruments of privilege, whose access depends on possession of certain amount of resources and/or wealth. For instance, protection of inviolable rights to dignity, life, equality, security and etcetera have become dependent on status and/or wealth. Thus, it is imperative to locate the role which the leadership is supposed to occupy in this regard. Thus, the object of this contribution is to ask why it appears as if the post 1994 democratic dispensation also (unwittingly) legitimized acute social exclusions or systems that proliferates social inequalities under which majority of poverty stricken households are banished to historic disadvantages and/or socio-economic deprivations invented under apartheid? At the center of attention is to stress that the continued social inequalities constitute precursors of social instability, which inherently threatens the survival of this very delicate democratic dispensation. This is necessarily because democracy would be meaningless if the proletariat communities remained outside the social enclave of quality social security and physical securitywherein they are still subjected to poor or no social services owing to their less-treasured status.

It is also significant to highlight that South Africa's presence of legal norms and pro-equity policies have not successfully resolved questions relating to social exclusions and acute inequalities inherited from the past. This justifies the need to explore other methods that could assist in identifying shortfalls in the system. Therefore, this article is analytical in approach. It adopts a qualitative style of research. It employs the interrelated concepts of 'power and influence theory' and 'leadership theories' to make an assessment of South Africa's state of affairs. It utilizes these theories to explain why the notion of VIPsm is on the rise and is inherently threatening social stability.

3. Theoretical framework

Power, influence and leadership are interconnected concepts whose significance cannot be understated when it comes to discourses concerning social stability in society. This is necessarily because leaders are voted into power by the electorates on the understanding that they will utilize such legitimate/formal power or influence to serve the interests of communities in order to safeguard social stability.

Thus, this article derives strengths from theoretical connotations founded in Bass' 'theory of transformational leadership' and French and Raven's 'power and influence theories on leadership'.Whereas these theories have mostly been applied in studying leadership in typical organizational environments (Givens, 2008:4), this article ventures to use same theories to make an assessment of leadership as regards state leadership, in a country as

diverse as South Africa, and the understanding of widespread practice and application of the notion of VIPsm. This is because transformational leadership theory is also applicable to state functionaries exercising public power through public office or such related entities, whose actions have a significant bearing on social stability, well-being and livelihood of people in general. Thus, transformational leadership theory is most suited for evaluating how individual leaders or a collective team of state functionaries influence the running of the state, welfare of the people and social development while exercising state power.When exercising state power and/or executing public function, leaders ought to appreciate the significance of their actions as far as attaining social stability in society is concerned. Hence, public power has far-reaching consequences on social stability and social justice. But, it requires an authentic transformational leadership that is not VIP driven but rather people centered.

Very often than not, states' successes regarding rendering of social services depends on how state functionaries, officials tasked with executing public power or functions, and those actors alike from the private sector relate with members of the general public. This is similarly applicable when talking in respect to attainment of social stability. That is, state functionaries and actors in the private sector do occupy a significant position with regards to determining social stability and realization of social justice. It entails that their habits and lifestyles do influence social behavior among proletariats, effectively guiding society's social trends.

On leadership, moving beyond self-interest (*individualized consideration*) is what Bernard Bass (1985) described as being among central pillars behind the theory of transformational leadership. Other principles of transformational leadership are, namely; *idealized influence*, which embed invaluable norms, ethics and high standards, encouraging followers to emulate their leader in every setting. *Inspirational motivation,* concerned with empowerment of followers/citizens, and lastly, *intellectual stimulation* which is focused at fostering creative thinking and problem solving skills among followers/citizens. It requires leaders to prioritize communities they serve than their own selfish interests, which means they have to elevate interests of others than their own (Bass, 1990:21). According to Bass and Steidlmeier (1999:191), such leaders ought to uphold high moral and ethical standards and exhibit an impeccable amount of honesty, values which dissuade them from deliberately acting *mala fide*. This has profound implications on the notion of VIPsm, which is conversely about fulfilling individuals' egocentric desires, often with deceitful elements, for instance, on aspects such as equality or lack thereof, before the law. Hence, Bass and Steidlmeier (1999:190) accentuates that most leaders within political spectrums walk a fine line of moral probity, in that they may possess a public image of a saint while privately being deceptive devils especially because they masquerade as transformational leaders who care more about their followers' interests while they inwardly are horribly self-serving. They are described as *pseudo-transformational* leaders owing to their inauthentic tendencies of leadership. Such individuals seek to capture power and position even at the expense of citizens (Bass & Steidlmeier, 1999:187), solely to achieve self-aggrandizement targets.

In terms of transformational leadership theory, morals are an essential component needed to safeguard social stability. Burns (1978:428), a founder of transforming leadership, approached the question of leadership differently especially with regards to aspects relating to morals by emphasizing that leaders ought to be morally upright and well-ahead of their followers/citizens. In terms of this approach, and borrowing from Parry and Thomson (2002:2), key to transforming leadership is an understanding that it is an ethical, moral enterprise, through which the integrity of the state, its institutions and the relationship with citizens can be maintained. In this regard, it is required of political leaders to constantly ask if exorbitant expenditures in fulfillment of VIPsm is morally right, while their followers

Mashele Rapatsa, 'Vipsm', A Threat To Social Stability In South Africa: From Apartheid Exclusions To Democratized Inequalities

10.1515/eras-2016-0006

(electorate) lack basic services, or languish in abject poverty even. Although Mulla and Krishnan (2011:141) found that morality of the leader can only influence followers/citizens over a long period of time and when interacting closely together, it is amenable that leaders' extent of morality owing to transformational leadership do influence social behavior in society, and social stability in the end. Thus, leaders with less developed conscience and selfish tendencies deserve to be characterized as destructive pseudo-transformational beings.

It is indubitable that the political leadership ascend to office to exercise public power and influence the direction of the state and people's social lives. Hence, power has been described as being central to human affairs, social sciences studies (Turner, 2005:1) and public governance. Thus, it is significant to extrapolate an inherent interplay between leadership and exercise of such public power in terms of how it is sourced, and the purpose and outcome intended to be produced from exercising it. A more conceptually distinct approach to power theory can be located in the classical writings of French and Raven (1959) and Raven (1965), who went as far as describing leadership in terms of differential power relationships (Faeth, 2004:11).Through their taxonomy, they conceived five sources of power, namely; *legitimate, reward, expert, referent* and *coercive*power. For purposes of this article, attention is on *legitimate* and *referent powers,* particularlybecause legitimate power entrusts onto the leader, discretionary authority that determines destiny of groups of citizens. Thus, legitimate and referent powers are perhaps better positioned to explain why leaders use power to entrench VIPsm. Legitimate power, also known as formal (official) authority derives from the position or office being occupied by the leader, such as Presidency, Minister, Member of Parliament and so forth. Contextually, political leadership acquires this power by virtue of being voted into office by citizens. In contrast, Referent power is concerned with personal characteristics and capabilities to influence citizens. It entails that a leader with admirable traits such as good ethical conduct, honesty and competence is most likely to gain trust from citizens and thus influence social stability and social cohesion.

But both legitimate and referent power allow leaders (social elite) to exercise power in a manner that incidentallyinhibitsimpactful dissent.More so because social norms precipitating it require that orders given through it be complied with (Raven, 2008:4). In accordance with Gaventa's approach to power, the social elite use 'legitimate' power to attain social quiescence under which the poor cannot challenge or alter leaders' decisions, even when they are faced with glaring material disadvantage or inequalities (Sadan, 2004:39) as is the case in South Africa. It is for this reason that others believe the purpose of (political) power is necessarily to prevent groups or citizens from partaking in decision-making processes, and to also obtain passive agreements from such groups. Could this explain how VIPsm got entrenched and is now seen as an acceptable practice, in the midst of stark inequalities and socio-economic deprivations?

4. Anormative socio-constitutional perspective: an analysis

It is trite that the Constitution, 1996 founded a persuasively strong normative and institutional framework, also to socially make democracy workable. Given that the Constitutionis recognized as a footprint of social transformation, and an embodiment of hope for other emerging democracies in the world (Colasurdo & Marlin, 2013:285), it is significant to explain its stance with regards to the pursuit of social stability and resources-based differential treatment of humans. That is, does the Constitution support VIPsm? If not, can the exaggerated differential treatment of state functionaries be declared unconstitutional?

Constitutionally speaking, social justice, restoration of dignity, equality and non-racialism are amongst fundamental values which the post 1994 democratic dispensation

Mashele Rapatsa, 'Vipsm', A Threat To Social Stability In South Africa: From Apartheid Exclusions To Democratized Inequalities

10.1515/eras-2016-0006

committed to fulfilling. These values would go as far as forging mechanisms through which to safeguard social stability and reconciliation. In particular, sections 1(a), 7 and 9 accentuates on an ideal of achieving equality, be it substantive or formal, emphasizing on equal benefit and protection of the law, exercise and enforcement of rights, social security and physical security.Thus, equality is fundamentallyan integral part of the country's social and judicial jurisprudence, and occupies a central role of modelling transformation agenda and social relations (Rapatsa, 2015:19). This implies that without equality, democracy and its legal imperatives would become socially ineffectual (Gurin et al, 2002) owing to limited abilities to alter perceptions of leadership concerning legitimate power and relations with ordinary citizens.

The Constitution further entrenched the Bill of Rights in chapter 2, which ushered in a new normative framework concerning recognition and protection of human entitlements. It promised transformation whose mission amongst others would be to achieve societal equality and social justice. From this premise, Karl Klare (1998:146) coined Transformative Constitutionalism, and described it as a 'long-term project of constitutional enactment, interpretation and enforcement committed to transforming a country's political, legal and social institutions, and power relations in a democratic, participatory and egalitarian direction'. It ought to effect major social change (Klare, 1998:150) and heal wounds of the past (Langa, 2006:354), to fundamentally disrupt hostile social arrangements inherited from the past. But these values cannot be achieved in the midst of exaggerated social differentiation and treatment of human beings at the hands of pseudo-transformational leaders.

With the application of transformational leadership theory, it is deducible that the Constitution also envisioned having leaders and state functionaries that would not misconstrue ascendency to public office as a ticket to opulence, but as a social platform to work for a greater good in service to humanity. Impliedly, the Constitution's normative framework requires the political leadership to instill a culture where every citizen is valued as worthy of respect, life, dignity and social protection. According to Tucker and Russell (2004:106), such a culture ought to inculcate a sense of protecting mutual long-term commitments, purpose and interests. Such ideals are plainly lacking and unrealizable under VIPsm, because it is fundamentallyconcerned with protecting the interests of the social and ruling elite. This is well expounded in terms of the pluralist and elite theories of power, clearly illustrating how South Africa's elites are competing for influence in society and for control over the population, in this case, by imposing and normalizing such awful phenomena as VIPsm. For instance, why would leaders who claim to represent transformationand the people cling onto a 'ministerial handbook' whose origin can be traced back to apartheid inventions, and whose mission wasto exclusively appropriate unto the leadership a better life and social stability at the expense of citizens? This represent a departure from fundamental values that underpinned the struggle against apartheid. Subsequently, ordinary citizens gradually become despondent, and thus resorting to protests that result in social disruptions and social instabilities.

5. Conclusion

Though it appears as a mere perception, VIPsm is a phenomenon whose impact in determining social stability is conspicuously discernible through both its absence and/or presence. It describes the nature of relationships between political leaders and the general public, with the former using 'legitimate' and 'referent' power to entrench themselves as special beings, while masquerading as authentic transformational leaders. It is the contention of this article that VIPsm is morally repugnant and represents the worst form of pseudo-

transformational leadership, a self-serving social elite that exploits electorates to advance personal ambitions and self-aggrandizement. It is asserted that government's 'ministerial handbook', which is often cited by the pseudo-transformational leaders justifying VIPsm is thus at odds with the Constitution's fundamental value of equality, particularly given its noble transformative ideals. Thus, change is indispensable, and ought to be replaced by a socially viable ideology, guided significantly by ideals embedded in *Ubuntu,* an established ethical and moral philosophy which inculcates a culture of responsible citizenship, co-existence, mutual reciprocity of trust between leaders and citizens. Central to this ought to be an idea of re-instating the worth of every citizen to substantially resonate the Constitution's vision on social justice and transformation.

Mashele Rapatsa, 'Vipsm', A Threat To Social Stability In South Africa: From Apartheid Exclusions To Democratized Inequalities

10.1515/eras-2016-0006

6.References

Amstrong, P., Lekezwa, B. & Siebrits, K. (2008). Poverty in South Africa: A profile based on recent household surveys. *Stellenbosch Economic Working Papers: 04/08.*

Appolis, J. & McKinley, D. (2009). Movement-Building: The Capitalist Crisis and the South African Elections. Pampazuka. Issue 428.

Bass, B. M. (1985). *Leadership and Performance Beyond Expectations*. New York: The Free Press.

Bass, B. M. (1990). From Transactional to Transformational Leadership: Learning to Share theVision. *Organizational Dynamics,* 18(3), 19-31.

Bass, B. M. & Steidlmeier, P. (1999). Ethics, Character, and Authentic Transformational Leadership Behavior. *Leadership Quarterly,* 10(2), 181-217.

Buchanan-Smith, M. & Cosgrave, J. (2013). Evaluation of Humanitarian Action: Pilot Guide.*The Active Learning Network for Accountability and Performance in Humanitarian Action (ALNAP),* London: Overseas Development Institute.

Burns, J. M. (1978). *Leadership.* New York: Harper & Row Publishers.

Colasurdo, C. & Marlin, R. (2013). *South Africa's Constitutional Jurisprudence and the Path To Democracy: An annotated interview with Dikgang Moseneke, Acting Chief Justice of the Constitutional Court of South Africa. Fordham International Law Journal*, 37, 279-308.

Faeth, M. A. (2004). Power, Authority and Influence: A Comparative Study of the Behavioral Influence Tactics Used by Lay and Ordained Leaders in the Episcopal Church. PhD thesis, Virginia: State University.

French, J. R. P.& Raven, B. H. (1959). The bases of social power. In D. Cartwright (Ed.), *Studiesin social power* (pp. 150–167). Ann Arbor, MI: Institute for Social Research.

Frye, I. (2013). Policy Brief 2: Towards a decent living level. *Studies in Poverty and Inequality Institute,* pp.1-11.

Givens, R. J. (2008). Transformational Leadership: The Impact on Organizational and Personal Outcomes. *Emerging Leadership Journeys,* 1(1), 4-24.

Gurin, P., Dey, E. L., Hurtado, S.& Gurin, G. (2002). Diversity and Higher Education: Theory and Impact on Educational Outcomes. *Harvard Educational Review,* 72(3), 330-366.

Hall, K., Sambu, W., Berry, L., A., Giese, S., Almeleh, C. & Rosa, S. (2016). South African Early Childhood Review 2016. Children's Institute, University of Cape Town and IlifaLabantwana.

Klare, K. (1998). Legal Culture and Transformative Constitutionalism. *South African Journal on Human Rights*. 14(1), 146-18.

Klotz, A. (1995). Norms reconstructing interests: global racial equality and U.S. sanctions againstSouth Africa. *International Organization,* 49(3), 451-478.

Langa, P. (2006). Transformative Constitutionalism. *Stellenbosch Law Review*, 17(3), 351-360.

Lehohla, P. (2014). *Poverty Trends in South Africa: An examination of absolute poverty between 2006 and 2011.* Statistics South Africa,Statistical Release, Report No. 03-10-06.

Lehohla, P. (2016). *Quarterly Labour Force Survey*. Statistics South Africa,Statistical Release, Report No. P0211.

Lemon, A. (2004). Redressing School Inequalities in the Eastern Cape, South Africa. *Journal of Southern African Studies,* 30(2), 269-290.

Mashele Rapatsa, 'Vipsm', A Threat To Social Stability In South Africa: From Apartheid Exclusions To Democratized Inequalities

10.1515/eras-2016-0006

Lunenberg, F. C. (2012). Power and Leadership: An Influence Process. *International Journal of Management, Business, & Administration,* 15(1), 1-9.

Mattes, R. (2012). The 'Born Frees': The prospects for Generational Change in Post-apartheid South Africa. *Australian Journal of Political Science,* 47(1), 133 – 153.

Mulla, Z. R. & Krishnan, V. R. (2011). Transformational Leadership: Do the Leader's Morals Matter and Do the Follower's Morals Change? *Journal of Human Values.* 17(2) 129-143.

Parry, K. W. & Proctor-Thomson, S. B. (2002). Perceived integrity of transformational leaders in organizational settings. *Journal of Business Ethics*, 35(2), 75-96.

Patel, L. (2012). Poverty, Gender and Social Protection: Child Support Grants in Soweto, South Africa.*Journal of Policy Practice.* 11(1-2), 106-120.

Rapatsa, M. (2015). The Right to Equality under South Africa's Transformative Constitutionalism: A Myth or Reality? *Acta Universitatis Danubius.Juridica,* 11(2), 18-35.

Raven, B. H. (1965). Social influence and power. In I.D. Steiner & M. Fishbein (Eds.), *Current studiesin social psychology* (pp. 371–382). New York: Holt, Rinehart, Winston.

Raven, B. H. (2008). The Bases of Power and the Power/Interaction Model of Interpersonal Influence. *Analysis of Social Issues and Public Policy,* 8(1), 1-22.

Sadan, E. (2004). *Empowerment and Community Planning: Theory and Practice of People-Focused Social Solutions.* Tel Aviv: Hakibbutz Hameuchad Publishers.

Sanders, D. & Chopra, M. (2006). Key Challenges to Achieving Health for All in an Inequitable Society: The Case of South Africa. *American Journal of Public Health,* 96(1), 73-78.

Taylor, V. (2002). *Transforming the Present- Protecting the future: Report of the Committee ofInquiry into a Comprehensive System of Social Security for South Africa*. ConsolidatedReport.

Tucker, B. A. & Russell, R. F. (2004). The Influence of the Transformational Leader. *Journal of Leadership and Organizational Studies,* 10(4), 103-111.

Turner, J. C. (2005). Explaining the nature of power: A three-process theory. *European Journal of Social Psychology,* 35, 1-22.

Woolard, I. (2002). An overview of poverty and inequality in South Africa. Pretoria: *Human Sciences Research Council,* pp.1-15, (unpublished paper).