
**Abstract**
This study employs a corpus-based approach to make justifiable psychodynamic interpretations based on the statistical relationships that exist between linguistic variables in written texts. The text examined is Hitler’s (1943) “Mein Kampf”, which was assessed on the strengths of associations between body boundary imagery, primordial thought language and emotional language. The results largely confirm the research hypotheses identifying the use of body boundary functions as a defence mechanism associated to borderline and narcissistic organization for separating trauma from conscious awareness and for containing a fragile self-image and body schema. The discussion interprets the language pattern by drawing on various psychoanalytic theories in conjunction with Hitler’s biographical notes and Langer’s (1973) psychohistorical study of Hitler’s life.

**Keywords**: Hitler, Mein Kampf, National Socialism, fascism, body boundaries, psychoanalysis, corpus linguistics.
Introduction

1. Aim of the study

Language represents one of the key components of psychoanalytic theories and the so-called “talking cure” (Schafer, 1976; Spence, 1982; Wodak, 1981) - yet surprisingly, the combination of quantitative linguistics and psychoanalytic theories as a means to interpret intra-psychic processes that underlie discursive constructions of spoken and written texts has received only limited attention. Taking into consideration the capacity of computerized linguistics to identify and describe language patterns on the one hand, and the use of psychoanalysis to provide a theoretical framework to explain human behaviour on the other, the complex interrelation between language processes and unconscious motives of the mind might not be adequately explored and explained unless quantitative linguistic and psychoanalytic approaches are combined. Such a combined linguistic-psychoanalytic approach could have, for example, an implication on a quantitative psychodynamically-based personality assessment based on discursive processes.

Therefore, the aim of this study is two-fold. First, it employed a computerized approach to linguistic analysis to demonstrate the exploitation of computerized text analysis to conduct a psychodynamic personality assessment, and thus to infer the unconscious psychodynamic processes of an individual’s written text. The Regressive Imagery Dictionary (RID) and the Body Type Dictionary (BTD) content analysis dictionaries were applied to Adolf Hitler’s (1939) book “Mein Kampf” to assess the frequencies and strength of associations between body boundary imagery, primordial thought language, emotional language, and self- and other-references. The statistical relationships between the linguistic variables are assumed to give some insight into the unconscious dynamics, such as the existence of conflicting motives, that underpin Hitler’s language behaviour and psychodynamic processes, which are explained and interpreted using various developmental psychodynamic theories and constructs, as well as drawing on literature and psychiatric reports that examined Hitler’s personality and behavioural tendencies. The second purpose of this study was to explore the use of body boundary imagery and its connection to the neurotic fear of penetration, with the hard shell of a body container serving as a double-image of rigid political categories that differentiate between the “self” and “other”. Despite the clear
aim of this study to explore Hitler’s psychodynamic processes using computerized text analysis, the author also acknowledges that findings obtained in this study do not alone lead to make logical conclusions about Hitler’s psychological dynamics. Ideally, the results should be interpreted within the wider historical and political context and other information that inform Hitler’s psychological functioning. However, it might be possible to contextualize the findings in relation to the broader context of existing psychodynamic theories and constructs, including motives, conflict between motives, defenses and internal object representations, which are however not explored and discussed within the framework of this study.

2. Psychohistorical reports
Psychohistorical research devoted much attention to unravelling the underlying psychological dynamics and motivations of Hitler that lead to the horrors of the Third Reich. Notably, Langer’s (1973) “The Mind of Adolf Hitler – The secret war time report” represents a detailed psychoanalytic study of Hitler’s personality. The assessment portrays Hitler as the victim of a harsh upbringing that was dominated by an aggressive father and a submissive mother figure with whom Hitler formed a close attachment that increased his oedipal fear and resentments towards his father. As a young man, Hitler joined the army and Germany’s defeat in WWI was experienced by Hitler as a traumatic loss and evoked feelings of isolation and powerlessness that he experienced in early childhood at the hands of his brutal father. Hitler was hospitalized due to the psychosomatisation of these negative emotions in form of hysterical blindness and mutism. During that hospital stay, Hitler experienced visions of himself liberating the German nation from its enemies, the Jews. These visions coincided with a personality transformation in which he identified with the “masculine” paternal aggressor. The “feminine” masochistic weaker aspects of his personality were then suppressed and projected upon the enemy figure – the Jew who, just like Oedipus’ father, needed to be destroyed to ensure the survival of Hitler and the Germans. In his psychoanalytic assessment, Langer concludes that Hitler was “probably a neurotic psychopath with bordering on schizophrenia…he is not insane in the commonly accepted sense of the term, but a neurotic who lacks adequate inhibition” (p.126).
Unfortunately, Langer does not evaluate the meaning of this “lack of adequate inhibition” or the extent to which it could have impacted Hitler’s unconscious dynamic and decision-making processes. Despite this evaluative gap, psychological research has consistently associated a reduced cognitive and behavioural inhibition to symptoms of psychopathology and also high creative individuals (Harnishfeger & Bjorklund 1994; Martindale 1971, 1981). Such a reduced inhibition in creativity and a predisposition to psychosis have been related to an overinclusive cognitive style (Burch, Hemsely, Corr, & Pavelis 2005), which Martindale (1981, 1999) related to the Freudian (1900) primary-secondary process cognition continuum of consciousness. According to the Freudian theory (Freud 1900), primary process thinking is associated to right-brain hemispheric functioning and it is perceived to be concrete, irrational, free-associative, and autistic and it is unrelated to logic, time and spatial constraints, and thus associated to creative thinking and novel associations, whereas the secondary process thinking relates to the left-brain hemispheric functioning and it is abstract and oriented toward logic, reality and goal orientated.

3. Linguistic research on Hitler’s language

Apart from psychoanalytic assessments and explorations of Hitler’s personality, several literary critical studies have investigated the ideology of German National Socialism, its linguistic expressions and discursive representations of Nazi propaganda and its implied ideological belief (e.g., Hutton, 1999; Klemperer, 2002; Richardson & Wodak, 2009; Wodak & Richardson, 2013). One of the most interesting early linguistic analyses of the language style Hitler used to popularize the Nazi political movement was put forward by Burke’s (1984) _The rhetoric of Hitler’s ‘battle’_. In his criticism, Burke identifies the basis of Hitler’s propaganda in an imagery split that differentiated a German individual from a Jewish person. This was achieved through the use of religious language: identifying the Jew as ‘the devil’ became a material reference “in the visible, point-to-able form of people with a certain kind of ‘blood’” (p.63). In particular, post-WWI Germany was inherently susceptible to religious concepts because “it is based upon prosperity of poverty” (p.63). In this sense, the notion of the Aryan ‘blood’ became a superior and spiritual possession that set the Germans apart from the supposedly capitalistic and inherently inferior Jews. A medical framework was also used in which the ‘devilish’ Jews
seduced the Aryans in order to deprive them of their valuable blood and then to poison it through intermarriage. According to Burke, Hitler used a religious and medical discursive framework to “provide a non-economical interpretation of economic illness” (p.69).

Linguistic research has also focused on Hitler’s religious and medical imagery in relation to bodily metaphors (e.g., Musolff, 2007, 2008, 2010; Rash, 2006). For example, Chilton (2005) assessed Hitler’s manipulative argument structure using metaphorical compressions that draw on a disease and medical framework; Jews are described as parasites and social spongers (Schmarotzer), and Germans are identified as the physical and social host nation (das Deutsch Volk). In this sense, the notion of body-state blend has been used as double-imagery in political discourse that differentiates between the healthy “self” (i.e., the German people) and the ill “other” (i.e., the Jewish population). The utilization of the BODY AS A CONTAINER or BODY AS A STATE metaphor embodied a neurotic fear of penetration in which the hard shell of the protective skin functions as a rigid divide that encloses the genetic purity of the German blood and excludes the impure blood of the Jewish race. This view resonates with Chilton’s (1996) analysis of THE STATE AS A CONTAINER security metaphors in the discourses of the Cold War, which constructs dichotomous containment imagery that provides a cognitive differentiation between “inside and outside, self and others, friends and allies” (p.415). The concept of containment functions as a protective device to maintain the freedom and keep the self safe on the inside by warding off the expanding danger and oppression of the “other” that resides beyond the containing boundaries.

4. Body boundaries
Whereas cognitive linguistics focuses the metaphorical concept of the BODY AS A CONTAINER, psychological research has explored extensively how individuals vary in the way they experience the containing function of their body image, or schema. Based on a series of observational and experimental studies using the Rorschach inkblot test, Fisher and Cleveland (1956, 1958) developed an objective content analysis scoring system of body boundary awareness that measures barrier imagery (i.e., body boundary definiteness) and penetration imagery (i.e., body boundary
permeability). A high frequency of boundary imagery corresponds to a High Barrier personality, and a low frequency of barrier imagery indicates a Low Barrier personality. A wide range of experimental studies demonstrated that High barrier personalities are more independent, goal orientated, emotionally expressive and spontaneous, less suggestible and less dependent on a leader than Low Barrier personalities. In contrast, Low Barrier personalities may express a heightened concern for the safety and security of places, as a means of reinforcing their weak boundaries. Low Barrier personalities are also at an increased risk of developing hypochondriacal concerns, sadomasochistic tendencies, and neurotic and psychotic disorders in which the permeability of the body barriers is experienced on a continuum ranging from fantasies of bodily distortions and fragmentation up to complete depersonalization. These bizarre delusions are often related to a theme in which the powerless and defenceless body boundaries are violated and attacked by an external force.

Despite Fisher and Cleveland’s notion that barrier and penetration imagery represent independent personality dimensions rather than opposite ends of a polar personality model, the function of penetration imagery as a personality dimension has remained largely unexplored. Fisher (1970) suggested that the frequency of penetration imagery is dependent on various variables associated to the testing situation. Such a view has been also confirmed in research that identified that the frequencies of penetration imagery are related to the level of regressive cognition. Thus, penetration imagery decreases in the expected direction of primordial to conceptual thought functioning in personal memory recall, including autobiographical memories, day dreams and dreams (Buck & Barden, 1971). Conversely, empirical research exploring Fisher and Cleveland’s body boundary concept in relation to written literary texts put forward that a weak body image would coincide with an inflation in barrier imagery as a means to increase the perceived protection of the vulnerable body surface, and thus resulting in “a high incidence of both Barrier and Penetration imagery (Newbold, 1984, p.124). Wilson (2006) found that barrier imagery might represent a compensatory function of an enduring uncertain body boundary awareness associated with Low Barrier personality and penetration imagery would relate to context-dependent regressive cognitive functioning. The interdependent relationship between a weak body image and inflated frequencies of barrier imagery is also reflected in
Haward’s (1987) Body-Barrier Questionnaire (BBD) measuring body boundary finiteness based on the assumption that individuals who perceive their body boundaries as permeable and weak would tend to direct their attention to objects and concepts with a strong exterior. Drawing on Newbold (1984), a possible explanation might be that individuals with weak body boundaries, or Low Barrier personalities, might project their bodily fragility upon barrier imagery items that enable them to construct compensatory protective and reinforcing structures through the use of naturally occurring language. In the light of these theoretical concepts and suggestions, it remains yet unclarified to what extent Fisher & Cleveland’s body boundary scores derived from the verbal responses of Rorschach stimuli might be comparable to the frequencies of body boundary imagery in naturally occurring language, including literary texts.

**Psychoanalytic theories of body boundary formation**

Fisher and Cleveland’s body boundary theory propose that early infant socialization experiences and parental influences represent one of the strongest influences on the development of a coherent self-schema and body boundary image. Relational psychoanalytic theories (e.g., Winnicott, 1971; Wright, 1991) suggest that the infant’s bodily self becomes gradually internalized through the mother’s ability to attend to the infant’s bodily needs by provide a safe environment through her sensitive interaction (e.g., holding, touching, rocking) and communication with the infant environment (e.g., smiling, talking, singing). The mother is assumed to symbolize a containing function, for which her secure ego boundaries transform the infant’s intolerable emotions and sense impressions into more tolerable forms (e.g., Bion, 1962). The infant then internalizes these transformed emotions and also her containing function to create an internal container to differentiate between the “self” and “other”. In contrast, a lack of adequate maternal responses results in the infant being left with overwhelming feelings of uncontained anxiety that continue to exist as nameless projections resulting in the development of a fragmented self-image (Bion, 1962). The disturbed development of the primal body boundary, however, might result in the formation of an alternative body boundary, the so-called second skin, which wards off these uncontained anxieties (Odgen, 1989; Bick, 1968).
In addition, the infant’s early relationship with its mother provides a developmental blueprint of its social relationship, for which the functional interaction of the self with others’ realities shapes the development of a coherent social self-schema and the formation of multiple social selves (Benjamin, 1992; Bollas, 1987, Mitchell, 1993). The coherence of a social self is reinforced through inter-social mirroring that prevents the notion of fusion, the loss of boundaries to a regressive state of de-differentiation (Pines, 1998). The coherent self is then communicated on a linguistic level to its social environment with the linguistic expressions representing an appropriately homologous mirroring of the child’s internal world and mood (Bollas, 1987). On the contrary, an infant’s experience of an insufficient transformation of its projected anxieties is assumed to result in a schizoid position “where language is dissociated from feeling” (Bollas, 1987, p.37).

5. Research hypothesis

Based on the results of linguistic research exploring Hitler’s use of metaphorical language and the theories of body boundaries, Hitler’s increased concern with Germany’s security and the formation a rigid division between ethnicities would result in high frequencies of barrier imagery as a compensatory function of perceived vulnerable self-image and bodily schema. Thus, the first hypothesis (H1) is that Hitler’s “Mein Kampf” will yield higher frequencies of barrier imagery when compared with the ‘Belle lettres and Biography’ section of the Lob corpus. Based on the psychohistorical assessment that diagnosed Hitler as lacking adequate inhibition, possibly related to anti-social personality characterized by a reduced aggressive inhibition, the second hypothesis (H2) is that primordial thought language will be positively correlated with aggression lexis. Taking into consideration that Hitler’s weak body boundary awareness was expressed in a pronounced concern with bodily barriers and the political safety of Germany in relation to the Jews, the third hypothesis (H3) predicts that barrier and penetration imagery will be positively correlated. The fourth hypothesis (H4) predicts a positive correlation between penetration imagery and anxiety lexis, due to the lack of an adequate maternal holding environment necessary that would produce a secondary skin formation in response to narcissistic defence mechanisms and anxiety about body fragmentation. Hitler’s tendency to categorically differentiate between the “good” self (Germans) and the
“bad” other (Jews) leads to the final hypotheses. The fifth hypothesis (H5) predicts that self-references will be positively associated with positive emotions (e.g., glory lexis, affection lexis, positive affect lexis), whereas the sixth hypothesis (H6) anticipates that other-references will correlate positively with negative emotion language (e.g., anxiety lexis, aggression lexis, sadness lexis).

Method

Text

The text “Mein Kampf” (Hitler, 1930) is based on the German-to-English translation by Ralph Manheim (1943), which is considered to be a faithful literal word-for-word English-based translation to the extent that is most successful in precisely maintaining the breathlessness of Hitler’s argument and his linguistic peculiarities compared to other translations. Conversely, the footnotes of the Manheim translation convey an anti-national socialistic ideological undertone, which might have influence the semantic choices and thus influencing the meaning of the underling ideological meaning text (Baumgarten, personal communication). The book was divided into 28 segments in accordance with the original chapters. Thus, the book consists of two volumes: the first volume contains an introduction and 12 chapters, and the second contains 15 chapters. Although the text used in this study is based on an approved translation of the original German source text, the use of translated texts may represent a problematic proposition in some computerized content analyses. Specifically, translation losses between a source and target text can often result in variations in language-specific grammatical conventions as expressed through function words, such as determiners, pronouns, and prepositions, as well as the removal of ambiguities and culturally specific meanings. For example, German differentiates between the formal “Sie” and informal “du” second-person singular personal pronouns, whereas English does not make such a context-dependent distinction with the pronoun “you”. Content words, however, that share the same semantic meaning tend to be similarly distributed across texts that exist as translations in two different languages (Diab & Finch, 2000; Rapp, 1995). Out of this view, the lexical content of the BTD and RID are based exclusively on content words that are typically translated through a word-substitution process, for which the use of a
English target text should theoretically not represent any significant discrepancies in the frequency count of body boundary imagery, primordial thought language and emotional lexis in comparison to the German source text.

The control corpus was based on the LOB corpus (Lancaster-Oslo/Bergen Corpus) of British English (Johansson, Leech, & Goodluck, 1978) that is based on a one-million-word collection of over 500 written texts samples. Given the biographical nature of Hitler’s “Mein Kampf”, the G-section ‘Belle lettres and Biography’, which is based on 77 text samples including biographies, memories, literary essays and criticism, arts and general essays, seemed to be the most appropriate section for comparison.

**Objective measures**

**RID.** The Regressive Imagery Dictionary (RID) (Martindale, 1975, 1990) was applied to the text to gauge primordial and conceptual thought language. The RID is a reliable and valid coding scheme that measures the frequency of primordial and conceptual thinking. The RID contains 3,200 words and roots that are stored in 29 primordial thought categories, 7 conceptual thought categories, and 7 affect categories. Primordial thought is measured as the sum of the categories Drive, Sensation, Defensive Symbolism, Regressive Cognition, and Icarian Imagery. The semantic content and categories in the RID were derived from empirical literature and studies on primordial process cognition (Martindale, 1975, 1990).

**BTD.** The Body Type Dictionary (BTD) (Wilson, 2006) is a computerized dictionary that is a conceptually based on Fisher and Cleveland’s (1956, 1958) manual scoring system that calculates the frequency of semantic items categorised as barrier imagery and penetration imagery. In total, the BTD contains 599 words for barrier imagery and 252 words for penetration imagery, as well as 70 exception words designed to prevent the erroneous matching of ambiguous word stems that are assigned to 12 semantic categories (Wilson, 2008).

A slight overlap exists between the lexical items of the RID and BTD dictionaries. In total, approximately 5.34% (171) of the body boundary imagery lexical content, i.e.,
2.03% (65) of barrier imagery items and approximately 3.31% (106) penetration imagery items, are identical to the lexical content of the RID language categories. Thus, the overlapping lexis was removed from the RID dictionary and a modified version of the RID was used to assess the relationship between body boundary imagery and regressive cognition; however, the full version of the RID was maintained for the remainder of the analysis.

**Content analysis**

The BTD and modified RID were applied to the text using the PROTAN content analysis software program, which measures occurrences of category-based lexical content in texts (Hogenraad, Daubies, Bestgen, & Mahau, 2003). Subsequently, a lemmatisation process reduced inflected words to their base forms. For example, “agrees, agreed, agreeing” were all reduced to “agree”. The lexical content of the segmented and reduced text was then matched against the predefined categories of the BTD and modified RID. PROTAN computes two counts of lexical occurrences. The density count shows how many distinct lexical items (i.e., types) match each dictionary category, and the frequency count represents how many lexical items in total (i.e., tokens) match dictionary categories. The frequency rate was used in this study based on the following formula:

$$\text{Frequency rate} = \frac{\text{frequency count}}{\text{no. of tokens in segment}} \times 1000$$

**Statistical analysis**

All statistical calculations were performed with the statistical language and software “R” (R Development Core Team, 2011) and the R:commander {Rcmdr} package (Fox, 2005). A Shapiro-Wilks test of normality (Shapiro & Wilk, 1965) identified that the majority of the linguistic variables were normally distributed, $p > .05$, expect of barrier lexis, self-references lexis, $p < .05$, and affection lexis, anxiety lexis, and glory lexis $p < .05$. Next, an independent t-test was applied to compare the mean frequencies of barrier and penetration imagery between Hitler’s “Mein Kampf” and the control corpus, i.e., the G-section of the LOB corpus. Subsequently, a non-
parametric two-tailed Spearman rank order correlation coefficient correlation (Spearman, 1904) was used to assess the strength of association between regressive and body boundary imagery and emotional language.

**Results**

*Descriptive statistics*

The total word count and word count was calculated for all segments of the text. The results showed that the text used a total of approximately 236,341 words with a mean of 8440.75 words per segment (SD = 5891.79). The descriptive statistics of text length per text type and segment are shown in Table 1 and the descriptive statistics of primary process language, body boundary imagery and emotion language are shown in Table 2.

Table 1 – Total text length and text length per segment in Hitler’s "Mein Kampf".

<table>
<thead>
<tr>
<th>Segment</th>
<th>Word count</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>488</td>
</tr>
<tr>
<td>2</td>
<td>5,185</td>
</tr>
<tr>
<td>3</td>
<td>16,301</td>
</tr>
<tr>
<td>4</td>
<td>20,484</td>
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<tr>
<td>5</td>
<td>10,675</td>
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<td>6,475</td>
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<td>7</td>
<td>3,437</td>
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<td>6,640</td>
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<tr>
<td>9</td>
<td>3,033</td>
</tr>
<tr>
<td>10</td>
<td>2,688</td>
</tr>
<tr>
<td>11</td>
<td>20,623</td>
</tr>
<tr>
<td>12</td>
<td>16,465</td>
</tr>
<tr>
<td>13</td>
<td>13,576</td>
</tr>
<tr>
<td>14</td>
<td>4,495</td>
</tr>
<tr>
<td>15</td>
<td>18,861</td>
</tr>
<tr>
<td>16</td>
<td>1,064</td>
</tr>
<tr>
<td>17</td>
<td>3,339</td>
</tr>
<tr>
<td>18</td>
<td>3,922</td>
</tr>
<tr>
<td>19</td>
<td>6,193</td>
</tr>
<tr>
<td>20</td>
<td>9,580</td>
</tr>
<tr>
<td>21</td>
<td>3,247</td>
</tr>
<tr>
<td>22</td>
<td>12,822</td>
</tr>
</tbody>
</table>
Table 2 – Descriptive statistics of primordial thought language, emotional language, and body boundary imagery in Hitler’s “Mein Kampf” and the G-section of the Lob corpus.

<table>
<thead>
<tr>
<th>Linguistic variable</th>
<th>Mein Kampf (N = 28)</th>
<th>G-section Lob corpus (N = 77)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Primordial thought</td>
<td>7.56</td>
<td>0.67</td>
</tr>
<tr>
<td>Conceptual thought</td>
<td>10.51</td>
<td>0.66</td>
</tr>
<tr>
<td>Primordial thought modified</td>
<td>7.43</td>
<td>0.63</td>
</tr>
<tr>
<td>Conceptual thought modified</td>
<td>10.48</td>
<td>0.69</td>
</tr>
<tr>
<td>Barrier imagery</td>
<td>1.99</td>
<td>0.57</td>
</tr>
<tr>
<td>Penetration imagery</td>
<td>1.89</td>
<td>0.32</td>
</tr>
<tr>
<td>Emotion</td>
<td>5.27</td>
<td>0.86</td>
</tr>
<tr>
<td>Positive affect</td>
<td>1.04</td>
<td>.55</td>
</tr>
<tr>
<td>Anxiety</td>
<td>1.04</td>
<td>.48</td>
</tr>
<tr>
<td>Sadness</td>
<td>3.68</td>
<td>.88</td>
</tr>
<tr>
<td>Aggression</td>
<td>1.53</td>
<td>.49</td>
</tr>
<tr>
<td>Affection</td>
<td>.99</td>
<td>.49</td>
</tr>
<tr>
<td>Expressive behaviour</td>
<td>2.54</td>
<td>.45</td>
</tr>
<tr>
<td>Glory</td>
<td>2.78</td>
<td>1.88</td>
</tr>
<tr>
<td>Self-references</td>
<td>3.60</td>
<td>.56</td>
</tr>
<tr>
<td>Other-references</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**BTD in “Mein Kampf” vs. Lob corpus**

An independent t-test showed that Hitler’s “Mein Kampf” used significantly less barrier imagery than the G-section of the LOB corpus (MD = -.95), t (89.130) = -5.858, p < .001, and thus, the (H1) first hypothesis was rejected; Hitler’s text also used more penetration imagery but not at a significant level, p = .061.

**Strengths of associations between RID and BTD in “Mein Kampf”**

Consistent with the second hypothesis (H2), primordial thought language was moderately positive associated with aggression lexis, ρ = .39, p < .05, as well as
showing a moderate positive association with positive affect lexis, $\rho = .49$, $p < .01$, affection lexis, $\rho = .38$, $p < .05$, anxiety lexis, $\rho = .41$, $p < .05$, and sadness lexis, $\rho = .44$, $p < .01$. Barrier imagery was not significantly associated with penetration imagery, $p > .05$, and thus, the third hypothesis (H3) was rejected. Similarly, penetration imagery was not significantly associated with anxiety lexis, $p > .05$, and therefore, the fourth hypothesis (H4) was rejected. Consistent with the fifth (H5) and sixth hypothesis (H6), self-references was moderately positive associated with positive affect lexis, $\rho = .43$, $p < .05$, whereas other-reference showed a moderate positive association with anxiety lexis, $\rho = .50$, $p < .01$. Additional results showed that barrier imagery had a moderately positive associated with self-references, $\rho = .45$, $p < .05$, and primordial thought language was moderately negative associated with conceptual thought language, $\rho = -.49$, $p < .01$. Further, barrier imagery had a moderate positive association with primordial thought language, $\rho = .45$, $p < .05$, but it was moderately negative associated with conceptual thought language, $\rho = -.42$, $p < .05$.

**Discussion**

The results of this study largely confirmed the research hypotheses. In relation to the first hypothesis, Hitler’s “Mein Kampf” used significantly less barrier imagery and more penetration imagery than the G-section of the LOB corpus (H1), which indicates that Hitler possibly presents a Low Barrier personality with a reduced sense of body boundary differentiation as compared to the G-section of the LOB corpus. Although no consistent results have established in relation to the body boundary pattern of psychotic disorders, Fisher and Cleveland (1958) preliminary results indicated that low barrier and high penetration scores would differentiate individuals diagnosed with schizophrenia from healthy adults and neurotics. Conversely Fisher and Cleveland’s classification of schizophrenia dates from an era in which schizotypal and borderline personality disorders were included in the clinical construct. Coolidge and colleagues (2007), however, suggest that Hitler would be nowadays diagnosed with paranoid schizophrenic disorder as well as a series of personality disorders, such as paranoid, antisocial, narcissistic and sadistic personality disorders that are typically associated with a borderline personality organization “that is neither typically neurotic nor
typically psychotic“ (Kernberg, 1985, p. 5). In this sense, Langer’s (1973) diagnosis of Hitler presenting a neurotic disorder bordering on schizophrenia seems confirmed with the frequencies of barrier and penetration imagery as well as subsequent empirical research. Martindale and colleagues (1976) also suggested that Hitler might have presented a left-brain hemispheric deficiency due to physical characteristics such as trembling of the left extremities, for which a dominant right hemisphere might be consistent with some of Hitler’s cognitive tendencies of a reduced front-lobe inhibition associated to primary process functioning, such as auditory hallucinations. Such an explanation might be also consistent with Kernberg’s (1985) assertion that borderline personality organization would reflect an increase of right hemispheric primordial functioning.

The notion of a borderline personality and associated vulnerable narcissism might be also reflected in an increased need to protect the fragile self from external threats (Mollon, 1986). Such a motive might be consistent with the positive association between barrier imagery and self-references, which might be related to a vulnerable self-schema that is enclosed in a protective sphere to compensate for the experience of weak body boundaries. The following phrase “I (Self-reference) tottered and groped my (Self-reference) way back to the dormitory, threw myself (Self-reference) on my bunk, and dug my (Self-reference) burning head into my (Self-reference) blanket (Self-reference) and pillow (Barrier imagery).“ reflects the enclosing qualities of the darkness and blanket to the suffering human body. The notion of barrier imagery as an autistic form of self-protection might then represents a secondary skin formation of an vulnerable self that serves to differentiate between the internal “self” and the external “not-self” (e.g., Bick, 1968; Odgen, 1989). Out of this view and drawing on the political-historical context, Hitler’s political ideology with its rigid division of ethnic categories, e.g., “non Jews” and “Jews”, might have served then as an alternative protective container of his weak body boundary schema. In particular, Hitler’s vision of himself as the leader of the German nation with the Germans as his loyal political followers is consistent with the uni-directional power dynamic associated with rigid and formal Low Barrier group structures (Fisher & Cleveland, 1958), for which the group structure might have served as an additional protective boundary device for Hitler’s inherent fragile self-concept. With the loss of WWI,
Germany was highly traumatized and possibly susceptible to the political ideologies and the emotional need of stabilizing structures. Due to the hierarchical group structure of Low Barrier groups, any political manifestations and changes might be then perceived as an emerging occurrence, which would facilitate an environment in which the responsibilities of individual group members are diffused and ordinary people engage in evil behaviour and systematic acts of human crime (Fisher & Cleveland, 1958; Fisher, 2004; Zimbardo, 2007).

Borderline personality organization is assumed to relate to various narcissistic defence mechanisms, such as splitting, projection, projective identification, denial, omnipotence, idealization and devaluation as a means to protect the fragile self from external threats (Kernberg, 1985; Raskin, Novacek, & Hogan, 1991). Splitting represents the most poignant mechanisms in relation to the defensive organization of the ego in the borderline organization that serves to “keep apart identification systems of opposite qualities (Kernberg, 1975, p. 69). Such a mechanism of splitting can be seen in Hitler’s ideology that framed the German nation as inherently “good” and Jews as inherently “bad”, and thus to compartmentalize the world into dichotomous categories (Robins & Post, 1998). Out of this view, the positive association between barrier imagery and self imagery might also relate to the formation of a protective body boundary in a narcissistic organization as a means to ward off split-off traumatic experiences and painful emotions from conscious awareness due to their threat of annihilating his sense of fragile ego. In such a narcissistic organization, the perceived internally “good” parts of the self are reinforced through the glorified identification of the externally projected “good” parts, such as the identification of the Germans’ perceived superiority (Gerzi, 2005). In particular, the development of a weak body boundary schema in narcissistic vulnerability has been associated with dysfunctional early holding and containing maternal environment (Winnicott, 1971) and a lack of empathic mirroring (Mollon, 1986). The possibility that Hitler was exposed to such an insufficient maternal environment and lack of emphatic responses seems especially supported by Hitler’s biographical notes (Langer, 1973, pp.104-105). These notes describe Klara Hitler (née Poelzl) as a loving mother but also state that she endured several losses shortly before and after Hitler’s birth, including the births of several babies who died in early infancy, as well as continued domestic violence at the hands
of her husband Alois. Thus, the conclusion that Klara might have been emotionally preoccupied with her own feelings of loss and anxieties, unable to effectively contain and transform Hitler’s anxieties, seems reasonable. In such a negative containing experience, Hitler might have introjected his own untransformed and reinforced anxieties, as much as the mother’s own emotional experiences, which are then split-off from conscious awareness and projected onto the environment. As a result of this early traumatic experience of a failed maternal container, the Hitler might have developed a dysfunctional self and other differentiation that is typically characterized by a loss of hope and by isolation in which emotional organization is based on primitive narcissism, entitled thinking and hatred (Bion, 1955, 1962; see also Billow, 2003; Brenman, 2006).

The positive association between self-references and positive affect lexis (H5) might relate to the defence mechanisms of projection that has been most often described to explain Hitler anti-Semitic ideology (e.g. Waite, 1993). Out of this view, Hitler might projected his own feelings of inadequacy, shame and annihilation fear onto other, such as for example the Jews, driven by the narcissistic motive to maintain a positive and blame-free self-image, e.g., “for, to my (Self-reference) deep and joyful (Positive affect) satisfaction (Positive affect), I (Self-reference) had at last come to the conclusion that the Jew was no German”. In particular, Gadd (2010) noted that Hitler’s the projection onto the Jews enabled a psychological dissociation that avoided the mourning for the economic and psychological losses associated with WWI. In this state of dissociation, the prevailing feeling of melancholia and heightened narcissism replaced the capacity to love with a primitive hatred and sadistic pleasure by infusing suffering in the other. The hatred aimed to abolish any perceived difference as a defence to confront feelings of annihilation and separation (Gadd, 2010) as well as to bolster a fragile narcissistic self (Bursten, 1972). According to Hopper (2003), the awareness of differences between the self and other might also arouse anxieties of separation reminiscent, for which narcissistic defence mechanisms attempt to reduce these feelings of envy in form of malignant projections and aggressive attacks on to the “other”. Simultaneously, manic defences might be consistent with the narcissistic motive to ward-off feelings of pain through the use fantasies of omnipotence and idealization to enhance an unstable and fragile self-esteem and to deny the experience
of disappointment and powerlessness (Hopper, 2003). In this sense, Hitler might have not only projected his unwanted emotions unto others, but he might have also engaged in omnipotent fantasies in form of establishing moral superiority, such as for example by envisaging himself as the messiah to the German nation. The combination of unconscious hateful and sadistic drives, denial of feelings of loss that are juxtaposed a narcissistic self-image might be further expressed in the positive association between primordial thought language, aggression lexis, sadness lexis, and anxiety lexis, and positive affect language (H2). For example, the following paragraph reflects the associative closeness between positive affect, hatred and loss when Hitler explored an existential theme of professional choice and paternal conflict – “My youthful enthusiasm (Positive affect) for the master of Bayreuth knew no bounds. Again and again I was drawn to his works, and it still seems to me especially fortunate that the modest provincial performance left me open (Primordial thought) to an intensified experience later on. All this, particularly after I had outgrown my adolescence (which in my case was an especially painful (Sadness) process), reinforced my profound distaste for the profession which my father had chosen for me. My conviction grew (Primordial thought) stronger and stronger that I would never be happy (Positive affect) as a civil servant. The fact that by this time my gift for drawing had been recognized at (Primordial thought) the Realschule made my determination all the firmer. Neither pleas nor threats (Aggression) could change it one bit.”

In contrast, other-references were positively associated with anxiety lexis (H6), which lends further credence to the idea that Hitler might have projected his own split-off anxieties upon the “other” to reduce his own negative emotions and thus possibly demonstrating Hitler’s internal object representation of the other as a threatening entity. Such as negative internal object representation can be for example seen in the following phrase “On such days of reflection and cogitation, I pondered with anxious (Anxiety lexis) concern on the masses of those no longer belonging to their (Other references) people and saw them (Other references) swelling to the proportions of a menacing army”. Such a projection of Hitler’s anxieties onto the other might have served to give these free-floating emotions a concrete and embodied representation as means to gain some control over, rather than being controlled by, his anxieties. The act of unconscious projections, however, represents a natural process in which
individuals convert and align the external environment in accordance with the internal psychological world as an attempt to create a duplication of one’s internalized relationships with the primary caregivers embodied in the body boundary function. The duplication and extension of one’s internalized body boundary assume greater proportions that can manifest themselves on enormous and destructive scales in individuals with psychotic disorders (Fisher & Cleveland, 1958). The shaping of the external social structure typically is driven by the motive to recreate the individual’s early socialization experience to a regressive state of early organization in which the infant did not differentiate completely between the self and the m(other) which functions as a containing and holding environment to reduce feelings of anxiety and loneliness (Benjamin, 1992; Billow, 2003; Bollas, 1987; Mitchell, 1983). Hitler’s endeavour to shape a nationalistic Germany might have created a self-contained dynamic in which Hitler and the Germans identified with the projected “good” parts, such as Aryan purity, in which both parties would feed upon each other to bolster their self-esteem and sense of security, and thus to cope with the loss of the WWI defeat.

Moreover, the association between other-references and anxiety lexis might indicate a fear of penetration that would threaten his fragile self-esteem and enhance feelings of shame that underpin the narcissistic organization. In fact, Langer (1973, pp.131-132) describes Hitler as haunted by various anxieties related to the invasion and poisoning of his body in addition to various other obsessive concerns related to the mouth region (p.192). Fears related to the oral organs indicate unresolved neurotic emotions of a negative oedipal complex (e.g., Brierley, 1935). Such a negative oedipal complex is typically related to identification with the maternal figure and the development of a feminine and affectionate attitude towards the father, which has been in classical Freudian theory associated with the formation of homosexuality (Freud, 1911, 1924). Despite the considerable lack of proof that would indicate Hitler to be homosexual, Langer (1973, pp.175-176) describes Hitler as a man with a pronounced feminine attitude and behaviour that reflected his identification with his mother’s masochistic and submissive form of adjustment. It was not until Hitler joined the army and experienced the defeat of WWI that he transformed his personality by identifying with his father’s aggressive parts. According to Langer (1937), Hitler rid himself of all the
personality aspects that belonged to his feminine self by attributing them to the Jews, who then embodied these feminine personality components and thus were as equally disliked and hated as his former self (p.198).

Relational psychoanalytic theories hold that a neurotic fear of penetration relates to the formation of a too rigid or too permeable self-other boundary that has been associated with early family experiences of profound and traumatic body boundary violations (Skolnick, 1994, p.253). In fact, the Hitler household has been described as dominated by his tyrannical and aggressive father, Alois Hitler, who had little regard for his family’s personal boundaries. Although Hitler is assumed to have identified with the aggressive father image, the early experiences of helplessness and fear might have continued to exist as permanent sensory-impressions related to his oversensitive and vulnerable body boundaries. Hitler’s biographical notes that explicitly outline a disturbance in love relationships and the deliberate “setting up of a barrier against intimate relationships with other people, particularly women” (p.170). In contrast, other scholars have suggested that Hitler found sexual gratification through masochistic practices, such as being kicked hard and maltreated, that would function as a narcissistic defence mechanism against painful trauma related to early object loss that coincides with a weak body boundary image (Blos, 1991). This perspective further supports the notion of an early body boundary violation and the associated feelings of shame, in contrast to a loving and nurturing family environment.

**Conclusion**

The analysis identifies Hitler as a Low Barrier personality who overcompensated though the use of an alternative skin formation that encloses the fragile self-image and bodily schema manifested as a double-image symbolizing Hitler’s anxieties about penetration and intimacy. Although this corpus-based study exemplifies a deductive psychoanalytic account based on raw statistical data, as compared to a qualitative and detailed exploration of a personal biographical account, the results were substantiated by existing psychohistorical reports, such as Langer’s psychoanalytic interpretations. The quantitative linguistic approach used in this study also provided insight into the unconscious psychodynamic processes embodied in Hitler’s language use and
discursive construction of political ideology that are not necessarily available through a qualitative assessment. In this sense, this study provides empirical evidence that a corpus-based psychodynamic approach might represent a valuable method for personality assessment and the interpretation of unconscious psychodynamic processes that motivate an individual’s language behaviour. In summary, the analysis gave an interesting and informative insight into Hitler’s psychodynamic processes based on inferences related to his language pattern. It has to be noted that the results should be not be generalized to individuals representing the same language patterns as identified in Hitler by drawing on “Mein Kampf”. However, it might be possible to relate the causal chain of linguistic features to latent personality characteristics, such as psychopathic callousness, murderous rage, sense of inadequacy and victimization, which might drive the linguistic expression as well as the need to retaliate for the perceived narcissistic injuries.

Moreover, the author would like to draw attention that this study was based on an English translation of “Mein Kampf”, and thus results might slightly vary between the various translations. For example, the Nazi-approved English version by Murphy (1939) identifies a positive correlation between barrier and penetration imagery which would confirm the third hypothesis (H3) as well as supporting the notion that Low Barrier personalities to have a weak sense of self-protection, resulting in an increased need to protect their fragile body boundaries (Newbold, 1984; Wilson, 2006). The Murphy translation also yielded a significant positive correlation between barrier imagery and glory imagery, which has been associated in previous research with a narcissistic organization (Cariola, 2012), whereas the Manheim translation used in this study did not produce such a significant correlation. Due to these slight, yet perhaps relevant differences, the use of the original source text is ideally preferable compared to a translated version, because of the increase reliability of the obtained results and consequently an increased validity of data interpretation.

In addition, it is questionable to what extent a textual analysis would represent essentially an analysis of the translation that contains the translators personal ideological position and semantic decision as well as personality, as compared to an analysis of the source text as written by the original author. Complications associated
with the use of translations have also raised issues within the field of psychoanalytic literature in relation Freud’s original texts (e.g. Bettelheim, 1986; Timms & Segal, 1988). As much as a translator’s personal view influences the content of the translated text, it might be noteworthy to acknowledge that the author of this study attempted to maintain an objective position that corresponds with the statistical method employed as a means to distance herself from her own emotional weight associated to the person Adolf Hitler and the topic of German National Socialism. Such an emotional distancing might be perhaps also embodied at times in the passive grammatical voice. Taking into consideration that language patterns represent a unique and personal mode of expression of the unconscious modes of self- and other-relating, future research might allow for further exploration of regularities in the linguistic expression of the “unconscious idiom” (Matte Blanco, 1989, as quoted in Rayner, 1995). Hitler also wrote “Mein Kampf” before he ascended to chancellorship in 1933 and acted out his psychological processes in form of a destructive political power, for which future research could also explore Hitler’s speeches to identify whether his language patterns would be consistent or reflect possible changes over time.

One of the greatest statistical weakness of applying correlational methods to linguistic data, such as in this study, are the relatively moderate effect sizes of the correlation coefficients, which reflect an inherent problem associated with quantitative content analysis (Mergenthaler, personal communication). The relatively restricted lexical content of each dictionary variable represents only a small proportion of linguistic contents used in a given text. The majority of linguistic variables in spoken and written language are function words (such as pronouns, prepositions, articles, etc.) that make texts cohesive and coherent and provide a socially relevant dimension (see Argamon & Levitan, 2005; Chang & Pennbaker, 2007). The distribution of linguistic variables as a premise to draw interpretative conclusions of statistical correlations between linguistic variables presents a separate problem. As explained by Mergenthaler (personal communication), a significant correlation between linguistic variables based on normal distributions provides a statistical premise to conduct correlationally driven interpretations, whereas a correlation based on linguistic variables that do not follow a normal distribution could result merely in statistical artefacts that might not lend themselves to meaningful interpretations. Reporting
confidence intervals could offer a solution for indicating the reliability of an obtained significant result and thus drawing valid interpretative conclusions.

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