

## **IS THERE A HOUSING CRISIS IN NEW ZEALAND OR IS IT ONLY A METAPHOR? RESULTS OF CRITICAL METAPHOR ANALYSIS**

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### **Abstract**

*This paper reports on a corpus-based study of metaphor use in the discourse of the Auckland housing topic in News and Commentary sections of The New Zealand Herald over the months of July to September 2016, the time of intense debate in the media on the housing situation in Auckland. The paper outlines an approach combining cognitivist and the Critical Metaphor Analysis. The study aims to reveal the persuasive ideological functions of metaphors in the News and Commentary genres and the covert intentions of the writers with particular reference to perceptions of a housing crisis a year before elections in the country. Our findings include a classification of metaphors used in the reporting of and commenting on the housing situation in Auckland based on cognitivist conceptualisation of metaphors, a comparative statistical analysis of the metaphors used in the News and the Commentary genres, and an explanation of the factors that may influence the recipients' decoding of the identified metaphors. We conclude from the analysis of the newspaper texts and the corpora that the metaphorical language used in both these genres promotes the readership's perception of a market in crisis.*

**Keywords:** metaphoric expression, conceptual metaphor theory, critical metaphor analysis, socio-political discourse, corpus analysis

### **Introduction**

Rocketing house prices in 2016 and the insufficient housing supply in Auckland, New Zealand, led to ongoing debates in the media and moved many commentators to refer to the housing situation as a socio-economic and political crisis. The discourse used in the media at such times is of importance as it is via their discourse that the media fulfil the functions of informing the public, interpreting developments in the community, and influencing public opinion and civic decisions.

A central role in political discourse is played by metaphors due to their semantic, pragmatic and textual effects, and ability to evoke emotional responses (Charteris-Black, 2004; Perrez, J. & Reuchamps, M., 2015). The use and identification of metaphors have been investigated in a number of discourses and political domains: political and diplomatic dialogue and negotiation (Cameron, 2011; Musolff, 2004,

2011; Weng, 2013), religious discourse (Charteris-Black, 2004; Mohamed, 2014), party manifestoes, speeches by world known political leaders, advertising, news and financial reporting (Charteris-Black, 2004, 2011; Guo, 2013; Koller, 2004; Lopez & Llopis, 2010; Perez-Sobrino, 2016), debates about Europe and European integration (Drulak, 2006; Musolff, 2004; 2011), online news (Han, 2014), citizenship and immigration discourse (Lee, 2015; Salahshour, 2016).

However, areas and aspects of metaphor study in New Zealand socio-politics remain underdeveloped. We intend to explore aspects of metaphor use in the discourse of the Auckland housing topic in *The New Zealand Herald*, and through that, contribute to the understanding of the impact of metaphor on society.

## **Literature Review**

Much of the existing literature on the use of metaphor in socio-political discourse continues to explore its important function in discourses (Carver & Pikalo, 2008; Charteris-Black, 2004, 2011; Deignan, 2015; Fairclough, 2013; Kovecses, 2015; Li, 2016; Musolff, 2012) and debate the methodology of identifying and researching metaphors (Drulak, 2006; Praggeljaz Group, 2007; Wilson, 2011). The debated research methodologies, based on the authors' understandings of metaphor, could be classified into three major types.

### **Traditional/semantic/substitution approach**

The first approach builds on Aristotle's classical writing and considers metaphors to be rhetorical and substitutional decorative linguistic tools which transform meaning from literal to figurative and embellish the language (Walter & Helmig, 2008). However, critics of this approach see much more in a metaphor on examining it in context because it influences the type of value judgements that we make. Charteris-Black (2004, p. 25) for example, supports his criticism with the example of the phrase 'blood is shed', 28 occurrences of which in the Bank of English imply a negative evaluation of the person responsible for the killing unlike the possibly neutral evaluation the phrase may provide when taken out of context.

### **Cognitive approach/interactive view: Conceptual Metaphor Theory (CMT)**

CMT, deriving from Lakoff and Johnson's seminal work of 1980, conceptualises metaphors as crucial elements of cognition, which, rather than transforming plain into figurative language, structure our thinking as they represent one aspect, or domain, of experience in terms of another, e. g. *housing market as a wild animal* or *housing market as a game*. This school of thought focuses on 'conceptual metaphor' (CM) (Lakoff & Johnson, 1980; Lakoff, 2008; Drulak, 2008), assuming the existence of a universal system of 'primary metaphorical mappings' in our cognition (Lakoff, 2008, p. 26). It distinguishes between CMs, and metaphorical expressions (ME), which are also called 'linguistic metaphors'. A CM is a cognitive concept, not necessarily appearing in the actual text, but serving as a kind of a reference point for concrete

statements (MEs), which occur in the discourse and exemplify the CM. Thus, there is a variety of metaphors relying on the CM “*housing market*” is “*a wild animal*”: “*debt monster gaining weight*”; “*what a shambolic monster our city would have become*”.

Han (2014) supports the cognitive view that metaphor constitutes everyday English, and reiterates Lakoff and Johnson’s definition of metaphor as understanding one thing in terms of another and as a ‘cross-domain conceptual mapping’ between a *target domain* and a *source domain*, the latter often grounded in people’s physical, bodily, experience of the concept referring to the target domain. An example of this is the possible physical, bodily effect of a “*fire raging in the housing market*”.

Vertessen and De Landtsheer (2008) studied metaphor frequency, intensity, content and power in Belgian quality newspapers and tabloids at election time and between elections. They combine the traditional and the cognitive approaches, considering metaphors to be linguistic elements with important cognitive and emotional effects, and at the same time addressing the questions of why politicians use metaphors, and how and why political metaphors work, thus incorporating principles of Critical Metaphor Analysis (CMA). Lakoff and Johnson’s early CMT has received serious criticisms for its invented, decontextualised data, sourced from the researchers’ own mental lexicons or dictionaries and thesauri (Charteris-Black, 2004; Cameron, 2008; Deignan, 2010; Musolff, 2012), as opposed to data from real language use, hence calls to use corpus analysis (Drulak, 2008; Han, 2014) to establish a broader base for metaphor interpretation. Criticisms have also referred to cognitivists’ insufficient consideration of the textual grammatical form of the metaphor itself, to its highly irregular character, and to the effect derived from using a metaphor in combination with other figurative language, such as hyperbole or metonymy (Forceville, 2006).

The emphasis on the cognitive at the expense of the textual and contextual has now shifted. Kovecses (2011), for example, accepts the criticisms and calls for identification of linguistic and conceptual metaphors to be as complete as possible, for quantitative metaphor analysis to be supplemented by qualitative analysis, and for equal attention to be paid to regularity and irregularity in metaphor use.

A number of new cognitively oriented approaches have emerged, focusing on the complex relationships between metaphor and metonymy (Gentner & Bowdle, 2008) and on the principles of both ‘cognitive’ and ‘communicative relevance’. The latter is a modified cognitive approach informed by Relevance Theory within CDA (Cameron, 2011; Musolff, 2011, 2012; Wilson, 2011), where, unlike the coding-decoding communication model, communication is mediated by context.

Gibbs (2011) contends that many conceptual metaphors should be understood as allegories, i.e. extended metaphors which introduce a whole narrative about a metaphorical source domain in order to present a symbolic understanding of people and events in a certain context.

**Critical Metaphor Analysis (CMA)**

Charteris-Black's CMA approach (2004) accepts the CMT understanding of metaphor as a thinking constituent, but tests this claim against numerous examples of metaphor use in specific text genres, aligning CMT with the CDA tradition and corpus methodology. Charteris-Black shows that 'covert' and 'unconscious' intentions and ideologies underlie the use of metaphor in discourse, and through critical analysis of metaphor, these intentions and ideologies can be revealed and a stance on socio-political issues taken. To achieve this, he proposes a three-stage procedure:

- 1) *metaphor identification*, which aims at establishing the presence of metaphor and determining whether there is incongruity or semantic tension between a literal source domain and a metaphorical target domain; 2) *metaphor interpretation*, which aims at identifying the type of social relations constructed through metaphors; and 3) *metaphor explanation*, which aims at examining the way that metaphors are interrelated and become coherent in the context in which they occur." (p. 35)

He sees these as being similar to Fairclough's (2013) three stages of identification, interpretation and explanation, based on Halliday's (2014) functional linguistics.

Charteris-Black's approach (2004) highlights the complex linguistic, cognitive and pragmatic dimensions of metaphor and the contextual importance of metaphor in persuasion. Authors choose metaphors drawing on two types of resources: individual (thoughts, feelings, physical experiences, knowledge of language systems) and social (ideology, historical and cultural knowledge).

More recent approaches are characterised by overall integration of CMT and CDA disciplines (see Li, 2016), with cognitive linguistics paying more attention to discourse and sociocultural factors in language use, and CDA resorting to the methodology used in cognitive linguistics. It has now been confirmed that the use of metaphor can have cultural motivations (Musolff, 2012) and that different metaphors can co-occur, forming metaphorical clusters (Cameron & Stelma, 2004). Musolff (2006) distinguishes between the general source domain level and the level of specific metaphor source "scenarios", or "narratives" as focal areas of source domains, characterising a "scenario" as a set of assumptions made by competent members of a discourse community about typical aspects of a source situation, such as its participants and their roles, the "dramatic" storylines and outcomes, and providing a "platform to link the conceptual side of metaphor to its usage patterns in socially situated discourse" (p. 36). At the heart of Cameron's (2011) "complexity/dynamic systems approach" lies an understanding of linguistic and cognitive phenomena as processes, flows, or movement, rather than as objects.

However, following Chilton (2005), Song Guo (2013) is critical of CDA's insufficient attention to cognitive aspects of discourse and argues that the integration

of the two fields is beneficial to both because it is through human mind that discourse influences and changes social reality, hence the need to know cognitive processes.

Han's (2014) corpus-based, modified integrative CMA study of the use of war metaphors in Chinese online entertainment news and political news, suggesting that metaphors are genre specific, employs both qualitative and quantitative methods. Corpus analysis is seen as essential as it reveals the norms of language use (p. 32).

Of interest to this project is a recent corpus-assisted New Zealand study, the findings of which highlight the role of liquid metaphors in the representation of migrants in New Zealand socio-political discourse not only as a negative phenomenon (and the impact on housing being an important part of the negative representation), but also their role in shaping a view of immigration as a constructive force in New Zealand society (Salahshour, 2016).

## **This study**

Adopting an approach based on a combination of cognitive tenets and works by Charteris-Black (2004, 2011) and other scholars exploring the use of metaphor in authentic discourse (Cameron & Stelma, 2004; Drulak, 2008; Koller, 2004; Semino, 2008; Walter & Helmig, 2008), this study uses a corpus-based approach to investigate metaphor in news and comment texts published in *The New Zealand Herald*, all on the topic of Housing in Auckland. We follow Charteris-Black (2004, p. 21) in considering that a metaphor is caused by a shift in the conceptual system revealing a previously unperceived similarity between the referents in the original *source context* and those in the novel *target domain*. In addition to cognitive criteria, metaphor is also seen pragmatically as an incongruous linguistic representation, which aims to persuade, often covertly. Finally, a *conceptual metaphor* is a statement that resolves the semantic tension of a set of metaphors by showing them to be related.

## **Rationale, aim and research questions**

The study of metaphorical discourses of a traditional newspaper is important both for second language acquisition at an advanced proficiency level and for a native speaker's developed ability to comprehend and evaluate sophisticated socio-economic and political situations and their participants. By examining metaphors in a corpus of language, we may become more aware of what is hidden by a metaphor as well as what is highlighted by it, thus enabling us to challenge the author's stance and to propose an alternative way of thinking about the topic. Therefore, understanding more about metaphor is an essential component of intellectual freedom (Charteris-Black, 2004, p. 253).

We aim to reveal the possible rhetorical effects of the use of metaphors and their ideological functions in the current socio-economic environment of New Zealand, with a focus on the discourses of reporting and commenting on housing problems in

Auckland and with particular reference to perceptions of crises. A comparison of metaphors used in news reports and commentaries aims to contribute to the understanding whether the use of metaphors is genre-specific.

This study can be seen as an attempt to contribute to the investigation of metaphor as used in New Zealand media discourse, particularly in specific genres of language use.

The research questions we seek to address are:

1. What are the metaphors used in reporting and commenting on the housing situation in Auckland and how can they be classified?
2. What factors influence the decoding of the identified metaphors?
3. Is there any difference in the patterns of use of metaphors in the two genres under investigation?

### **Design and methodology**

Two small corpora were created: a corpus of news reports and a corpus of commentary articles on the topic of housing, published in *The New Zealand Herald* and collected over the period of 21 July - 21 September 2016 (162 texts totalling 111,606 words). Frequent sources of metaphors (e.g. human activity, politics, games) and targets (e.g. housing, housing market) were identified, as well as the multi-faceted relationships between the MEs via close reading and corpus analysis. Differences in metaphor use in the two corpora were identified, analysed statistically and explained. The news and comment texts were identified by using a search for Housing in Auckland on *The New Zealand Herald* website. The *Wellington Corpus of Written New Zealand English* was used for comparison purposes.

Two software programmes were used to examine the corpora: *WordSmith Tools 7.0* (Scott, 2016) to produce word and keyword lists and concordances of MEs, and *Wmatrix* (Rayson, 2008) for corpus analysis and comparison. *Wmatrix* has similar functions to *WordSmith Tools* but, in addition, enables the semantic annotation of texts. *Wmatrix* assigned semantic tags to the keywords from the corpora, thus enabling the predominant semantic categories in the corpora to be identified.

Candidate MEs were identified through close reading of texts from the two corpora and from the wordlists and keyword lists. These expressions were then classified according to the source domains to which they refer. On this basis, CMs were identified and checked against the semantic categories as determined by *Wmatrix*. Further searches for MEs were then carried out, concordances were made for each of the expressions and the CMs modified as appropriate. Conventional metaphors were distinguished from idiosyncratic ones so that only the former were further analysed. This was done following the Pragglejaz Group's (2007) Metaphor Identification Protocol (MIP) approach: if the candidate metaphor has a more basic meaning distinct from its contextual meaning but can be understood in relation to it, then it is regarded as metaphorical. In the example '*Our MPs are promising to feed us*

*affordable homes*, ‘feed’ has a basic meaning of ‘give food to’ ‘provide enough food for’ (Longman Dictionary of Contemporary English, 2003). The contextual meaning is the more abstract one of the organised provision of housing but it can be understood in comparison with the more concrete meaning of ‘feed’. Once candidate metaphors were confirmed, the CMs and MEs were then analysed to determine patterns and inter-relationships, including comparisons between their use in the two corpora. For this purpose, four 400-word snapshots from each of the two corpora were subjected to descriptive statistics and two-sample hypothesis testing.

**Table 1. Information on corpora used in study**

Corpus	Number of texts	Total number of words	Average text length
Corpus of texts on the topic of housing in Auckland from <i>The New Zealand Herald</i> News sections	127	79,869	628 words
Corpus of texts on the topic of housing in Auckland from <i>The New Zealand Herald</i> Comment sections	35	31,737	906 words
Wellington Corpus of Written New Zealand English	500	1 million	2,000

## Findings

### Identification stage

As indicated above, identification of MEs in the two corpora and the CMs that frame them involved several stages of corpus-based analysis. Wordlists and keyword lists were produced for the Herald News (HN) and the Herald Comment (HC) corpora using *Wordsmith Tools Version 7* (Scott, 2016), with a subsequent focus on the words that directly reference the topic of housing in Auckland. *Wmatrix* was used to confirm semantic categories for those keywords, a process which pointed to potential target domains, e.g. HOUSING, HOUSE(S), HOME(S), MARKET, INVESTORS as well as aspects of these domains: apartments, tax, speculator.

### Keywords

The keyword lists indicate the words that occur unusually frequently in comparison to a reference corpus, in this case the *Wellington Corpus of Written New Zealand English* (1993). *Auckland*, *per*, *cent*, *housing* occupy the first four places for both keyword lists. *Said* is fifth for the HN corpus but does not appear in the first 50 for

the HC Corpus, clearly indicating the reportage nature of the HN Corpus. Table 2 contains selected data from the keyness lists with an indication of the key concepts contained in the corpora, a potential focus for exploration of metaphor use. (See Appendix 1 for keyness data for the first 50 keywords for each of the corpora.)

**Table 2. Selected keyness data in HC and HN corpora**

Keyness data	Similarities and differences
<i>prices, buyers, house, houses, investors, bank, banks, property</i>	The key semantic concepts in both corpora are related to <i>housing</i> as
<i>market</i> is at 13 on the HN list but is at 34 in the HC list	Reflects the dominance of the topic <i>Auckland housing market</i> in news
<i>crisis</i> is at 15 on the HC list but at 67 on the HN list	Greater willingness to describe the situation as a crisis
<i>bubble</i> is at 35 on the HC list but is absent from the HN list	Apparent propensity for a rhetorical stance on the housing market
<i>council</i> is at 30 on the HN list but is at 39 on the HC list <i>government</i> is at 28 on the HC list but is at 84 on the HN list	An apparent indication of who the key agents are seen to be, indicating the greater role proposed for the government by commentators.
<i>tax</i> is at 9 on the HC list but is at 161 on the HN list	Possible indicator of a key solution as seen by commentators
<i>apartments</i> is at 18 on the HN list but is at 42 on the HC list	Indicating favoured solutions
<i>Chinese</i> is 37 on the HN list but is at 55 on the HC list	Indicating ethnicity is less of an issue in commentaries than in reports

## Wordlists

A comparison of the keyword and frequency lists for the two corpora seems to indicate that news reports and comment pieces both focus on core aspects of the housing market: *house, houses, property, prices, buyers, investors, banks*. The news reports, however, seem to foreground stories of access to *homes* or lack thereof with the council seen to be a key player, whereas the comment texts are more likely to describe the situation as a *crisis or bubble* and to see the government as a key player.

## Wmatrix

A secondary analysis was carried out using *Wmatrix3*, a semantic annotation tool (Rayson, 2008). The semantic tags assigned to the keywords identified using *Wordsmith Tools* were analysed in order to confirm the predominant semantic



categories in the two corpora. *Table 3* indicates that the most key semantic categories are those of *Architecture, Buildings, Houses* and *the Home* (for example, *Architecture, kinds of houses & buildings* and *Residence*); *Money and Commerce* (particularly *Money: generally, Money and Pay, Business: selling*); *Possession: getting and giving*. (See Appendix 2 for a full list of the relevant *Wmatrix* semantic categories with keyness data from each corpus aligned to them.)

**Table 3. Most frequent words in each category and sub-category**

Semantic category, UCREL Semantic Analysis System at <i>Wmatrix</i>	Most frequent words for each category or sub-category
Architecture, housing and buildings	Housing, house, house, building, properties, apartments, housing market, apartment, developers, build, built, construction, developer, buildings, estate agent, home owners, housing shortage, residences
Residence	Home, homes, housing, residential, living, suburbs, residents, dwellings, live, house, tenants, dwelling, suburb, liveable, accommodation, lived, housing policy
Money: generally	Investors, tax, capital, investment, income, investor, funding, fund, afford, profits, profit, banking, GDP
Money: cost and price	Price, prices, house prices, cost, house price, costs, worth, valuation, expense, charge, pricing, fees, charged, priced, cost of living, prices up, expenses, revaluations, costing
Business: selling	Buyers, market, sales, sold, buy, sale, rent, bought, selling, rents, buying, rental, purchase, trade, sell, agency, buyer, purchases, auction, agencies

The first two semantic categories of the above table guide us towards investigating HOUSING and the last three towards investigating MARKET. For this study, we have combined these into a single target domain of HOUSING MARKET.

### Target and source domains

This study then examined the target domain of HOUSING MARKET and identified expressions that carry metaphorical senses (see Table 4).

The number of MEs occurring in the news texts is recorded as being higher than that in the commentary texts when the MEs relate to the source domains of “games”, “crisis” and “fire”. However, the total number of MEs used in the commentary genre is higher than in the news genre.

**Table 4. Source domains with frequency of metaphorical expressions in corpora**

Source domain	MEs in corpora	
	HN	HC
LIVING BEING	15	15
SPACE WITH IDENTIFIABLE BOUNDARIES AND ACTIVITIES INSIDE IT	3	8
A GAME WITH RULES AND PLAYERS	22	11
A CRISIS	21	16
A POLITICAL AGENDA	4	31
A BUBBLE	4	17
STATE FUNCTION TO BE REGULATED	9	9
ON FIRE	13	6
A WILD ANIMAL	5	7
IMPACT/AGENT/ACTOR	4	4
PRODUCT OF HUMAN ACTIVITY	3	3
A PROCESS OF ACQUISITION	6	-
CONFLICT/STRUGGLE	3	3
A STRUGGLE BETWEEN GOOD AND EVIL	-	5
Totals	112	135

### Interpretation stage

As the interpretation stage involves establishing a relationship between metaphors and the cognitive and pragmatic factors that determine them (Han 2014), we identified the CMs, involving the primary metaphorical mappings for the understanding of the notion of the current housing market in terms of other things, creating “cross-domain conceptual mappings” (p. 37). The choice of MEs and then their interpretations are based on the encoders’ (the authors’) and decoders’ (the researchers’ in this case) individual thoughts, feelings and bodily experiences of the world as well as their knowledge of the lexical fields and various word senses that are available.

Below is a list of such cross-domain conceptual mappings identified in our corpora, with examples of the actual MEs presenting the CMs.

### HOUSING MARKET IS A LIVING BEING

*“Chinese buyers are showing a growing appetite”; “Auckland market has proved resistant”; “the timing of the market collapse”; “the market could not achieve”; “market drivers”; “you are seeing the market responding”; “the market has turned”; “to get onto the Auckland property ladder”; “if the housing market grows fast”.*

We observe clear examples of metaphors based both on personification and reification here, having to do with the market's growth, spread, fall, rise, collapse or activities leading to 'feasting' of some of the participants and to 'misery' of the others. Yet, there is a third element to the market – those who are struggling to get in.

### **HOUSING IS A SPACE WITH IDENTIFIABLE BOUNDARIES AND ACTIVITIES INSIDE IT**

*"to measure market distortions and spill-overs"; "the top of the market"; "at the bottom of the market"; "demand and supply sides of the market"; "swamped the market with supply"; "a surge in buyer activity".*

The associations aroused in the reader by the metaphors in the above two categories have to do with measurable and changing dimensions, physical movement and change.

### **HOUSING MARKET IS A GAME WITH RULES AND PLAYERS**

*"the impact of the recently announced rule-changes"; "these tighter lending rules are likely to hurt some first home buyers outside Auckland"; "locking first home buyers out"; "property investors are increasing their stronghold on the housing market shutting out families"; "first home buyers snapped up 25%"; to up the ante Labour's new Housing policy promises to".*

The source domain of 'game' is often closely related to that of 'fight/struggle/war', where first-home buyers struggle to get on the board. This relationship demonstrates the possibility of a ME being mapped onto more than one source domain.

### **HOUSING MARKET IS A PRODUCT OF HUMAN ACTIVITY AND OBJECT OF THAT ACTIVITY**

*"prices and the NZ dollar are over-cooked"; "giving up smoking or learning to cook on a budget"; "property prices in Auckland were over-cooked".*

The semantic tension created here by reification implies the usefulness and the need of housing to humans, similar to cooked food. At the same time, the source domain of over-cooked food, particularly within the context of its "messy consequences" sounds alarming.

### **HOUSING MARKET IS A PROCESS OF ACQUISITION**

*"it will be cold comfort for first-home buyers", "first home buyers have picked up 33% of sales"; "leaving wannabe buyers starved of choice"; "would help more first home buyers get a foothold in the Auckland market".*

The above expressions can serve as a perfect illustration of the multi-semantic nature of metaphors. Depending on the personal, social and cultural experiences of a particular reader, different other semantic aspects of the metaphor may come to light. Thus the possible CMs for some of the above expressions can be: *housing is a*

*struggle/fight/war; or: housing is a building difficult to climb into; or: housing is a game with players that first-home buyers appear to be losing.*

### **HOUSING MARKET IS A WILD ANIMAL**

*“debt monster gaining weight”; “arrest the wild caravan of real estate exuberance”; “expected to cool Auckland’s rampant market”; “bidding war mania”; “what a shambolic monster our city would have become”.*

The metaphors in this cohort are based on personification and reification at the same time and often present the characteristic metaphoric feature of exaggeration, and it may depend of the decoder’s individual experiences which of these bases appear the brightest.

### **HOUSING MARKET IS IMPACT/ACTOR/AGENT**

*“leaving wannabe buyers starved of choice”; “it is sickening for first home buyers who are shut out of the market”; “rules are likely to hurt some first home buyers outside Auckland”; “crisis drives jump in WINZ loans”.*

First home buyers feature in this cohort of expressions again, but with a different, stronger, source domain as the impact is physically and emotionally hurtful, painful and leading to the need of help, something that could be related to most people’s personal experience in one way or another. There is also social impact and reference to crisis is made.

### **HOUSING MARKET IS ON FIRE**

*“whether the limits would help to cool the overheated market”; “rates have undoubtedly added fuel to the fire”; “the fire raging in the housing market”; “the heat was coming out of the market”.*

The source domain of fire/heat/fuel creates a vicious picture for the housing market. The heat increases as it is not only the market that is fuelled, but also Auckland, demand, excessive speculation, buyer behaviour. The fuel is added by immigration levels, increase in bank credit, thus lifting the negative evaluation to its extreme. We also note the polysemy of the key word ‘cool’.

### **HOUSING MARKET IS A STATE FUNCTION TO BE CONTROLLED AND REGULATED**

*“should be cracking down on speculators”; “to strengthen the provisions in putting heat on the landowner”; “jolly good go at unclogging the housing supply chain”; “keep that under control and cut fat”.*

The bodies to set the rules and to control and supervise housing are the Government and Government departments, agencies, banks, Council.

**HOUSING MARKET IS CONFLICT**

*“likely to hurt first-home buyers”; “account of the heated debate and struggle”; “for stretched first-home buyers”; “as affordability in Auckland is more squeezed than anywhere else”.*

**HOUSING MARKET IS STRUGGLE BETWEEN GOOD AND EVIL**

*“the evil which is land banking”; “the social carnage which is the Auckland housing market”; “the drug of lower interest rates”; “disease of house price inflation”.*

**HOUSING MARKET IS A BUBBLE**

*“market bubble is still growing”; “could spot a housing bubble only after it burst”; “economists call this “riding the bubble””; “by further inflating a housing bubble”.*

The CM does not seem to bear a lot of seriousness – rather it creates a light and somewhat playful impression, distancing the housing bubble away from the coder’s concerns or worries. Even the use of the verb “burst” does not add seriousness to the description of the condition of the housing as the totally opposing views of the two major political parties are presented as both lacking a serious approach and unworthy of serious comment.

**HOUSING MARKET IS A POLITICAL AGENDA ITEM**

*“shooting for the housing moon”; “our MPs are promising to feed us affordable homes while pledging”; “the central bank is barracking about the increased”; “labour policy promises to “crack down on speculators”; “politicians only tinkering with the current crisis”.*

The source domain here is closely connected with the domain of bubble but presents housing overtly as being an object of major politics despite the need of urgent decisions and action.

**HOUSING MARKET IS CRISIS**

*“lost control of the Auckland’s housing crisis”; “a crisis rages”; “the nation’s housing crisis”; “creating brain drain”; “state of emergency over”; “housing agencies to get on top of the crisis”; “Auckland’s rent crisis is forcing would-be tenants to..”; “the housing crisis was likely to deepen”.*

Because of the source domain having to do with serious danger and threat, this cohort of MEs draws a picture of a crisis situation needing urgent solutions on the part of politicians and political bodies.

**Explanation stage**

The concordance lines, confirmed by the analysis of their contexts, often demonstrate the use of two MEs in one sentence, which strengthens the evidence for metaphors being a characteristic feature of the two newspaper genres:

*“with dwindling supply had pushed prices up”*  
*“it is sickening for first home buyers who are shut out of the market”*  
*“it is expected to cool Auckland’s rampant market”*  
*“needed to arrest the wild caravan of real estate exuberance”*  
*“jolly good go at unclogging the housing supply chain”*  
*“to get its act together on the housing crisis”*  
*“the huge imbalances of a housing bubble gone mad”*

These expressions often contain two homogenous, simultaneous or consecutive, actions, with the verbs being the key words of the MEs:

*“swamp the market with supply and suppress prices”*  
*“giving up smoking or learning to cook on a budget”*  
*“keep that under control and cut fat”*  
*“this market is not a bubble and it is not a crisis”*

This use of parallel structures and crowding of the metaphor space shows how metaphor usage serves evaluative purposes and at the same time helps to decode the intention of the writer.

### **Comparison of MEs in News and Commentary genres**

It is noticeable that our corpora not only abound in MEs, but also the expressions, often presenting different CMs, do not occur in isolation from each other but rather cluster in short spans of text. This tendency, although observed in both the genres, appears to be more characteristic of commentaries than news reporting, where the overall number of metaphors is lower. A comparison of the following two sets of concordance lines and their context samples for ‘housing’ illustrates this point. As short a text passage from the commentary corpus as 210 words contains 21 metaphorical expressions: *“told a story of two bubbles”*; *“a broad-based real estate market bubble relative to rent and income emerged... and then collapsed... with the financial crisis”*; *“a new bubble formed... but had not spread”*; *“the excesses of the Auckland housing market, including the bidding war mania for run-down properties”*; *“the mushrooming Auckland statistics”*; *“riding the bubble”*, whereas the newspaper’s news reporting genre of the same length contains only 15 metaphorical expressions: *“New Zealand’s spiralling property prices”*; *“the rate of Auckland house price increase was slowing”*; *“the average price is on the verge of topping \$1 million”*; *“are over-inflating where prices are heading”*; *“property investors are increasing their stronghold on the housing market”*; *“shutting out families needing a bigger home”*; *“to take a lion’s share of housing stock”*.

The descriptive statistics (see Table 5) and the two-sample hypothesis testing (see Table 6) carried out on 4 randomly chosen 400-word snapshots from each of the two genres showed sufficient evidence to conclude that the mean, median and mode indicators of metaphor use in the commentary texts are statistically greater than that in the news texts (at 5% level of significance).

**Table 5. Descriptive statistics**

Commentary texts vs News texts in <i>The New Zealand Herald</i>		
	Commentary texts	News texts
Mean	26.1667	13
Standard Error	3.6825	2.3805
Median	25	11
Mode	17	10
Standard Deviation	9.0203	4.7610
Sample Variance	81.3667	22.6667
Skewness	0.3023	1.7792
Range	21	10
Minimum	17	10
Maximum	38	20
Sum	157	52
Count	6	4

**Table 6. Two sample hypothesis testing**

	Commentary texts	News texts
Mean	26.1667	13
Variance	81.3667	22.6667
Observations	6	4
Pooled Variance	59.3542	
Hypothesized Mean Difference	0	
Df	8	
t Stat	2.6476	
P(T<=t) one-tail	0.0147	
t Critical one-tail	1.8595	
P(T<=t) two-tail	0.0294	
t Critical two-tail	2.3060	

In the analysed samples, the use of clusters clearly assists in developing a “story” (Cameron, 2011) and intensifies the authorial negative evaluation of the passage and the potential persuasive power of the text, thus allowing the paper to better fulfil its function of influencing public opinion. When using clusters, writers appear to select metaphorical expressions from the same CMs for the same cluster, for example, “*to cool Auckland’s rampant market, the limits would help to cool the overheated market*”. This use of metaphor extensions (Gibbs, 2011) may be an indication of cognitive aspects of metaphor selection and an assistance with the readers’ decoding process. Here however a question arises whether decoders of all political views and

dispositions in fact undergo the same kind of influence that is intended by the writer-encoder using such closely clustering, highly emotional metaphors.

A further question arises about the nature of the expression 'housing crisis' itself. It appears from the analysed corpus data that the housing discourse is characterised by the use of the 'crisis' metaphor, both the CM "CRISIS" itself and inter-related CMs, such as BUBBLE, WILD ANIMAL, FIRE. This is a finding from both the genres. Even those CMs that do not appear to relate directly to the "CRISIS" CM often harbour MEs with a strong negative evaluation, for example, *"the evil which is land-banking"*; *"the social carnage which is the Auckland housing market"*; *"the disease of house price inflation"*.

The rhetorical nature of many of the MEs occurring in the news reporting genre is often different from the highly emotional ones used in the commentary corpus. The texts reporting the news provide frequent references to experts' and politicians' opinions, and analysis of statistical data on housing, which may be determined by the expectations of their audience. The MEs often share the same CM, thus referring to the same source domain of LIVING BEING with their characteristic changes and activities, and involved in drawing a scenario of gaining profit, money and commodity. They may therefore be appealing to the cognition of the reader rather than to emotions, which makes us think that to certain categories of reader they may appear even more persuasive than the emotive ones.

## **Discussion and conclusions**

Our corpora provide evidence for the ideological and rhetorical motivation for the use of metaphors. The analysis of the metaphorical expressions used in the two corpora illustrates that metaphors occurring in the discourses of news reporting and commenting on the housing market in a traditional newspaper in New Zealand do in fact draw on a relatively wide ranging set of source domains, but these prove to be systematic rather than unlimited in both corpora. Domains such as living being, space with identifiable boundaries, product of human activity, process of acquisition, game playing, fire, impact, wild animal, threat, object of politics, state function, conflict, bubble are common to both types of discourse to varying degrees. However, several source domains appear to be more productive than others. These are fire, game, bubble, political agenda, and crisis.

The critical part of metaphor analysis was identifying the underlying cognitive basis of metaphors and revealing the intentions of speakers, who use metaphor to persuade by combining the cognitive and linguistic resources at their disposal (Chateris-Black, 2004). Our analysis has shown that the latter is accomplished by the writer selecting MEs from two or more CMs or by clustering MEs from one CM. When the MEs do not occur in isolation from each other, but tend to cluster and interact in the same paragraph, sometimes forming extended metaphor frames, they form a manifold



housing market scenario, often producing the impression of political propaganda. This concurs with the results of earlier studies (Cameron & Stelma, 2004) and in particular with a finding related to the use of war metaphors in the political genre (Han, 2014). The above appears more characteristic of the commentary genre, where influencing judgments is a central discourse goal.

It is also interesting to note that POLITICAL AGENDA ITEM appears to be the most productive CM in the commentary corpus, serving the pragmatic role of a stylistic resource for conveying authorial evaluation, that is a particular rhetorical intention within a particular context, and demonstrating the importance of metaphor in persuasion and in shaping society. It is also indicative that this CM is more productive in the commentary corpus, where the intention of persuading the reader is paramount, than in the news corpus.

A question arises as to whether the encoder uses MEs intentionally or naturally. On the other hand, how does the decoding process work? Is meaning made by encoder and decoder together? Is the message always decoded as intended? The choice of metaphors for the encoder depends on individual resources and experiences.

The decoding process may also depend on the same factors. Metaphoric speech allows the decoder to participate in the final formulation of the message delivered to them as a metaphor leaves it to the addressee to finally formulate the information in their mind. We believe this brings metaphoric speech close to the arts, particularly music, which is perceived by an individual as addressed to them personally at the subconscious level. Similarly to music, which operates emotional, non-concrete images, a metaphor switches on a person's individual experience, which is correlated with the metaphor and reinforces its effect. Fine art influences the recipient in a similar way, with the only difference of using visual metaphors, which also subconsciously connect with personal experience.

The CM CRISIS is one of a group of semantically-related CMs identified in our analysis. The nature of these CMs (FIRE, BUBBLE, EVIL, etc.) and the related MEs feature extreme and dramatic lexical meanings that in combination contribute to the perception of a situation clearly judged to be in crisis. Our analysis of *The NZ Herald* texts and the corpora shows that the writers use metaphorical language in both the news and the commentary articles about housing to describe its critical condition. The persuasive drive, or rather the political agenda in the paper at such a time is seen by us as part of a larger effort to increase the involvement of the public in politics and thus to perform its function of forming a public opinion.

With regard to limitations and subjects of further investigation, we can assume that the difference in the nature of the MEs used in the HN and the HC corpora will not necessarily be confirmed on all texts of these two genres as it may depend on the political disposition of the author and on other persuasive newspaper genres.

Another, related, subject for further research would be the researcher subjectivity factor. More limitations of the study include the limited focus on the topic of housing only, the short period during which texts were collected, the explanation stage being based on two short, randomly selected text samples, and the statistical analysis being based on only 8 randomly selected 400-word text snapshots. The findings therefore will require further confirmation.

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**Appendix 1****Comparison of the keyword lists from *The New Zealand Herald News* and *The New Zealand Herald Comment* corpora**

<i>NZ Herald News</i> corpus			<i>NZ Herald Comment</i> corpus		
Keyword	HN corpus frequency /%	WCWNZ E frequency/%	Keyword	HC corpus frequency /%	WCWNZE frequency/%
1 HOUSING	636/0.79	32/-	1 HOUSING	158/0.5	32/-
2 CENT	162/0.51	254/0.02	2 CENT	162/0.51	254/0.02
3 PER	175/0.55	337/0.03	3 PER	175/0.55	337/0.035
4 AUCKLAND	179/0.56	558/0.05	4 AUCKLAND	179/0.56	58/0.05
5 SAID	793/0.99	2120/0.20	5 PRICES	90/0.28	85/-
6 PROPERTY	283/0.35	112/0.01	6 PROPERTY	90/0.28	112/0.01
7 HOMES	198/0.25	71/-	7 LAND	127/0.40	455/0.04
8 PRICES	189/0.23	85/-	8 BANK	84/0.26	145/0.01
9 PLAN	192/0.24	101/-	9 TAX	77/0.24	187/0.02
10 UNITARY	111/0.14	0	10 INVESTORS	45/0.14	26/-
11 BUYERS	121/0.15	9/-	11 BUYERS	37/0.12	9/-
12 AFFORDABLE	110/0.14	2/-	12 HOUSES	58/0.18	95/-
13 MARKET	228/0.28	286/0.03	13 HOUSE	101/0.32	532/0.05
14 HOUSE	288/0.36	532/0.05	14 UNITARY	27/0.08	0
15 PRICE	179/0.22	145/0.01	15 CRISIS	38/0.12	39/-
16 HOUSES	142/0.18	95/-	16 URBAN	44/0.14	82/-
17 INVESTORS	100/0.12	26/-	17 BANKS	38/0.12	49/-
18 APARTMENTS	84/0.10	8/-	18 RESERVE	37/0.12	46/-
19 BANK	145/0.18	145/0.01	19 RENTAL	28/0.09	13/-
20 MEDIAN	84/0.10	9/-	20 MORTGAGE	27/0.08	13/-
21 AUCKLAND'S	100/0.12	33/-	21 INCOME	46/0.14	120/0.01
22 YEAR	302/0.38	906/0.08	22 PRICE	49/0.15	145/0.01
23 PROPERTIES	109/0.14	61/-	23 GROWTH	50/0.16	156/0.01
24 CITY	173/0.22	283/0.03	24 WEALTH	31/0.10	36/-
25 AVERAGE	121/0.15	104/-	25 POLITICIANS	32/0.10	41/-
26 HOME	260/0.32	734/0.07	26 ESTATE	25/0.08	13/-
27 RESIDENTIAL	78/0.10	12/-	27 AFFORDABILITY	18/0.06	0
28 LENDING	73/0.09	8/-	28 GOVERNMENT	88/0.28	633/0.06
29 APARTMENT	71/0.09	13/-	29 RESIDENTIAL	23/0.07	12/-
30 COUNCIL	148/0.18	253/0.02	30 GAINS	25/0.08	19/-
31 SALES	96/0.12	75/-	31 VALUE	50/0.16	198/0.02
32 NZ	90/0.11	64/-	32 RATES	49/0.15	189/0.02
33 MONTH	11/0.14	129/0.01	33 AUCKLAND'S	28/0.09	33/-
34 BUILDING	127/0.16	201/0.02	34 MARKET	58/0.18	286/0.03
35 RESERVE	80/0.10	46/-	35 BUBBLE	20/0.06	6/-
36 BANKS	81/0.10	49/-	36 PLAN	38/0.12	101/-
37 CHINESE	78/0.10	43/-	37 DEPOSITS	22/0.07	13/-
38 JULY	88/0.11	73/-	38 BANKING	27/0.08	35/-
39 DEVELOPERS	57/0.07	9/-	39 COUNCIL	52/0.16	253/0.02
40 JUNE	95/0.12	104/-	40 SUPPLY	34/0.11	97/-
41 SOLD	90/0.11	93/-	41 LENDING	18/0.16	8/-
42 GROWTH	106/0.13	156/0.01	42 APARTMENTS	18/0.06	8/-
43 DATA	106/0.13	174/0.02	43 INFLATION	26/0.08	43/-
44 DEPOSIT	50/0.06	9/-	44 INFRASTRUCTURE	20/0.06	15/-
45 AUCKLANDERS	47/0.06	7/-	45 CAPITAL	33/0.10	93/-
46 CONSENTS	45/0.06	6/-	46 KEY	33/0.10	95/-
47 VALUE	107/0.13	198/0.02	47 ASSETS	33/0.10	20/-
48 COUNCILLORS	52/0.06	17/-	48 KIWISAYER	13/0.04	0
49 MILLION	115/0.14	245/0.02	49 AUCKLANDERS	17/0.05	7/-
50 QV	37/0.05	0	50 YEAR	92/0.09	906/0.08

## Appendix 2

### **The New Zealand Herald News and The New Zealand Herald Comment Keyness data aligned to the Wmatrix semantic categories**

Semantic categories in order on the <i>Wmatrix</i> USAS table	News corpus keywords (order of keyness in brackets)	Comment corpus (order of keyness in brackets)
Getting and giving: possession	PROPERTY (6)	PROPERTY (6)
Giving	LENDING (28)	SUPPLY (40) LENDING (41)
Important	VALUE (47), QV (50)	VALUE (31)
Difficult		CRISIS (15)
Comparing	AVERAGE (25)	
Government	COUNCIL (30), COUNCILLORS (48)	GOVERNMENT (29) COUNCIL (39)
Politics		POLITICIANS (25)
Architecture, kinds of houses and buildings	HOUSING (1), HOUSE (14), HOUSES (16), APARTMENTS (18), PROPERTIES (23), APARTMENT (29), DEVELOPERS (39), BUILDING (34)	HOUSING (1), HOUSES (12), HOUSE (13) (REAL) ESTATE (26), APARTMENTS (42)
Residence	HOMES (7), HOME (26), RESIDENTIAL (27)	RESIDENTIAL (29)
Money generally	BANK (19), RESERVE (35), BANKS (36), DEPOSIT (44)	BANK (8), BANKS (17), RESERVE (18), DEPOSITS (37) BANKING (38), RATES (32), KIWISAVER (48)
Money and pay	INVESTORS (17)	INVESTORS (10), TAX (9), INCOME (21), CAPITAL (45), ASSETS (47)
Money: affluence		WEALTH (24)
Money: debts		MORTGAGE (20)
Money: cost and price	PRICE (15)	PRICE (22)
Money: Cheap	AFFORDABLE (12)	AFFORDABILITY (27)
Money: expensive		INFLATION (43)
Business Generally		INFRASTRUCTURE (44)
Business: selling	PRICES (8), BUYERS (11), MARKET (13), SALES (31), SOLD (41)	PRICES (5), BUYERS (11), RENTAL (19), MARKET 34),
Places	CITY (24)	URBAN (16)
Mathematics	MEDIAN (20)	
Numbers	MILLION (49)	
Size: big	GROWTH (42)	GROWTH (23)
Quantities	PER (3), CENT (2)	PER (3), CENT (2)
Objects generally		BUBBLE (35)
Speech/communicative	SAID (5)	
Groups and affiliation	UNITARY (10)	UNITARY (14)
Allowed	CONSENTS (46)	
Time: period	MONTH (33), YEAR (22), JULY (38), JUNE (40)	YEAR (50)
Knowledge	DATA (43)	
Wanted	PLAN (9)	PLAN (36)
Success		GAINS (30)
Geographical names	AUCKLAND (4), AUCKLAND'S (21), NZ (32), CHINESE (37), AUCKLANDERS (45)	AUCKLAND (1). AUCKLAND'S (33) AUCKLANDERS (49)
Geographical terms		LAND (7)
Personal names		KEY (46)