# Reading the City: The Linguistic and Semiotic Landscape of Macao's San Ma Lo (新馬路)



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For my colleague Mao Sihui, who taught me to think visually about culture.

**Abstract** Macao is a city of six hundred thousand inhabitants, but it receives 30 million visitors per year. Together, they constitute the public that interacts with public space. In distinction from bilingual Hong Kong (Chinese and English), the public signage in Macao is at least trilingual: Chinese, Portuguese and English, reflecting the unique historical and cultural makeup of the city as a former Portuguese colony that has recently (1999) been returned to China. This paper explores the linguistic landscape of Macao from the perspective of a case study of the main street of the historic city center.

The study of linguistic landscape can be considered part of what Scollon and Scollon (Discourses in place: language in the material world. Routledge/Taylor and Francis, London, 2003) term "geosemiotics", referring to the analysis of meanings that are materially situated in the space of urban agglomerations. Adapting a phenomenological approach to data collection, the researcher photographed every aspect of Macao's main street, including public signage in its linguistic aspect, as well as architectural spatial semiotics and the visual semiotics of advertising and shop fronts. The data were classified into three broad categories of spatial, visual and linguistic semiotics, as well as sixteen detailed subcategories. The author's analysis of the data is informed by Chmielewska's (Semiosis takes place or radical uses of quaint theories. In Jaworski A, Thurlow C (eds), Semiotic landscapes: language, image, space. Continuum International Publishing Group Ltd, London/New York, pp. 274–291, 2010) insight into the subjectivity of the process of semiotic interpretation. The semiotic analysis of situated meanings reveals the linguistic and socioeconomic challenges Macao faces as a tourist hub, gaming (gambling) centre and Special Administrative Region of the People's Republic of China.

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### 1 Introduction

The Special Administrative Region of Macao (Macao S.A.R.) is a former Portuguese colony (since 1557) which was handed back to the People's Republic of China on December 20th, 1999 under the "one country, two systems" formula that guarantees the territory a special degree of autonomy until 2049. The official languages of the territory are Chinese and Portuguese, and the legal system continues to be based on Portuguese law. Government documents are prepared bilingually in Chinese and Portuguese, and sometimes in English translation, as a non-binding ancillary language. With its geographical location approximately forty miles across the Pearl River Delta from the territory of Hong Kong, English has long been an ancillary part of the linguistic make up of Macao, but has arguably become more widespread since 1999 because of Macao's socioeconomic transformation into a gaming (gambling) boomtown. This paper explores Macao's sociolinguistic make up, as well as aspects of its socioeconomic transformation, through a case study of the linguistic landscape of the historic main street of Macao, Avenida de Almeida Ribeiro, popularly called San Ma Lo or 新馬路.

Macao is a fascinating instance of "glocalization", the intersection between globalizing tendencies and local specificities. One could expect that with the return of sovereignty to China, there would be increased visibility of communist ideology, and also, a tendency for Chinese to supplant Portuguese. However, the development of Macao since 1999 has been driven by several vectors. The most visible of these is what could be termed "blatant capitalism" (Mao Sihui, personal communication), as a consequence of the expansion of the gaming industry. The gaming monopoly (single concession) of Societade de Jogos de Macao, headed by the local tycoon Stanley Ho, was broken up in 2002 by the granting of two more gaming concessions, to Sands China (headed by the American tycoon Sheldon Adelson) and to Wynn Macao (headed by the American Steve Wynn). Because of an allowance for subconcessions, instead of three competing casinos this resulted, within the space of 15 years, in over thirty newly built casinos and gigantic resort hotels, with revenue by far exceeding that of Las Vegas. The population of Macao increased by approximately 50%, from four to six hundred thousand; wages rose substantially (between twofold and fourfold depending on the type of work); residential real estate prices rose tenfold; and the number of tourists per year, at 30 million, is fifty times the size of the population. Besides gambling, tourists come to enjoy the beauty of the Portuguese-style architecture; a diversity of restaurants with all of the world's cuisines; high-end brand-name shopping; and services ranging from (semi-legal) prostitution to luxury spas, swimming pools and golf courses. Macao has also become a popular MICE (Meetings, Incentives, Conferences and Exhibitions) destination for concerts, weddings and conventions, bringing in additional private and business tourism that is not exclusively gaming oriented. Thus, the most powerful socioeconomic vector in Macao is the ideology of capitalism (capital development) and globalization (internationalization of the economy), paradoxically promoted by the (local and national) government since the reunification with China.

The second possible expectation since the return of sovereignty to China could be that Chinese would replace Portuguese. However, Portuguese, as text, continues to be widely visible around the city, if not to the same extent audible. Although the number of Portuguese-speaking inhabitants is relatively small (several thousand), Macao is being promoted by the local and national governments as a gateway for trade with Lusophone (Portuguese-speaking) countries, such as Brazil, Angola, Mozambique, São Tomé and Príncipe, East Timor, and Portugal. Visitors and migrant workers and expats from these countries are visible; e.g., there is an African presence in Macao; and, partly because of the Eurozone crisis, there are newly arrived expats from Portugal as well as Portuguese who have resided in Macao for many years. Moreover, the small but influential community of mixed-heritage "Macanese" (colonial families who settled in Macao since the sixteenth century and intermarried with local Chinese and with people from other Portuguese colonies and points of contact) constitute the core identity of Macao's cultural uniqueness (Carvalho 2015). Thus, the sociolinguistic status of Portuguese is open to investigation.

The other prominent variables in Macao's sociolinguistic make up are the use of English as an international language, and the choice between Cantonese and Mandarin Chinese. English is widely visible, and audible (probably) to a larger extent than Portuguese. To enable interaction with international tourists, hotels and restaurants, especially at the high end, favour the hiring of English-speaking staff. Despite preferential policies for hiring local staff (mandatory in the case of casino croupiers), this results in the hiring of non-local staff who can demonstrate fluency in English, e.g., from mainland China, the Philippines and Malaysia. English has a privileged although not exclusive status in the educational system, with the top schools and university programmes being offered in the English medium. However, local supply of English speakers into the labor force does not keep up with demand, resulting in the importation of English speakers. Many of these imported workers are bilingual or multilingual, bringing other languages into the social mix, e.g., Mandarin, Tagalog, Malay.

In terms of varieties of Chinese, Macao (as well as Hong Kong) has the local specificity of being predominantly Cantonese-speaking, with local in-group solidarity, while Mandarin is recognized as the standard national language. Textually, Chinese in Macao (as well as in Hong Kong and Taiwan) is written with traditional characters, while mainland China and Singapore use simplified characters (promoted as the official script in mainland China after the communist revolution of 1949). In addition, there are speakers of other Chinese dialects in Macao, e.g., a large community from Fujian. To various extents, most people in Macao are bidialectal in Cantonese and Mandarin (or multidialectal if originating in a non-Cantonese community) and may also be biliterate in traditional and simplified characters, depending on their degree of exposure to mainland texts. However, I can illustrate the local preference for Cantonese with the following anecdotal evidence. In a second-year university course on Intercultural Communication that I was teaching in English to Chinese-English Translation and Interpretation majors in the spring semester of 2015, the students were not paying close attention to the details of a case study we were discussing. As a comprehension check, my teaching assistant, a young American Fulbrighter, asked one of the students sitting in the front row (who was from mainland China) to summarize the details to the class in Chinese. The student did so in Mandarin. Not convinced that the students in the back of the class were paying attention, the TA asked a student in the back row (who was a local Macao Chinese) to repeat what her classmate had said. The student asked for permission to use Cantonese rather than Mandarin, then repeated the summary. From the above interaction, I had the impression that the active use of Mandarin was as difficult for the local student as the use of English, i.e., that the exercise had been perceived by the student as more of an interpretation task than a simple comprehension check. In this particular class, the Mandarin speakers had chosen to sit in the front row; the middle row consisted mostly of local students and included a local Filipina who spoke Cantonese but whose native language was Tagalog; and the back row consisted entirely of local Macao students.

Intercultural communication can be defined as "communication between individuals from different cultural or ethnic backgrounds, or between people from subculture groups" (Liu et al. 2011, p. 287). In the public space of Macao, intercultural communication takes place on a daily basis, mediated through several languages (Portuguese, English, Cantonese, Mandarin, and others). Individuals and cultures are in contact in this tourist city – local post-colonial Portuguese, Macanese, Cantonese Chinese, and Chinese of other subgroups; expats and migrant workers from English-speaking countries, Lusophone countries, mainland China and Southeast Asia; businessmen and visitors from all over the world (mainland China, East and Southeast Asia, South Asia, Russia, Australia, etc.). The study of linguistic landscape – language visible in public space – can reveal the extent to which different languages and visual codes are present in the sociolinguistic make up of Macao. Based on the above overview of the sociolinguistic and socioeconomic situation of Macao, the following research questions are formulated:

- RQ1. Which languages are present on public signs in Macao, and what (if anything) can be inferred from the linguistic landscape about the sociolinguistic situation of Macao?
- RQ2. What (if anything) can be inferred from the linguistic (or geosemiotic) landscape about the socioeconomic situation of Macao?

This formulation is intentionally vague, because the extent of inference depends partly on the methodology, and partly on the researcher's subjectivity, as will be explained below in the discussion of linguistic landscape research and its extension into the framework of geosemiotics (Scollon and Scollon 2003; Jaworski and Thurlow 2010).

#### 2 The Study of Linguistic Landscape: LL as Evidence of Social Change

#### 2.1 Sociolinguistic Data: Naturalistic Data

The linguistic landscape provides a window on the sociolinguistics of a locality through naturalistic data that are entirely unelicited. The data are authentic in the same sense that "authentic text" is used in Communicative Language Teaching i.e., the text is not originally written with an academic purpose in mind (whether teaching or research). Unlike either quantitative research design (e.g., factorial analysis) or qualitative methodology (e.g., questionnaires, interviews, focus groups), these written discourse data are already present in the environment, and thus are not skewed a priori by the researcher's expectations. The linguistic landscape provides field data that are more static than the typically oral data of a journalistic report, yet show dynamism over a longer course of time, comparable to the time strata of archaeology, although revealing the stratum of the present rather than of the past.

The study of linguistic landscape was first defined as pertaining to urban settings, perhaps because that is where the major part of publicly displayed written discourse can be found:

The language of public road signs, advertising billboards, street names, place names, commercial shop signs, and public signs on government buildings combines to form the linguistic landscape of a given territory, region, or urban agglomeration (Landry and Bourhis 1997, p. 25, cited in Garter 2013, p. 190).

Since Macao is an urban setting, I will not concern myself with other possible sources of data to which LL methodology has been applied, such as road signs and billboards in rural settings, postings in cyberspace, etc. Generally speaking, however, the idea of "linguistic landscape" pertains to any kind of discourse displayed in public space. Moreover, it could be extended to oral discourse and mixed media (e.g., typically a political demonstration takes place for the purpose of displaying discourse in public space, the temporal frame is transient rather than fixed, and the message is conveyed in both oral and written form), as well as to other kinds of purposive symbolic activity in public space. Below, I will comment on some aspects of an extended construal of "linguistic landscape".

#### 2.2 Temporal Dynamism

Linguistic landscape studies have dealt predominantly with affixed signs rather with "transgressive" (Scollon and Scollon 2003, pp. 147–151) discourse that is unsanctioned by the authorities of a given locality, such as graffiti, randomly affixed individual advertising, or discarded print matter. While affixed signs are also the focus of this study, it should be noted that even sanctioned signs are often more temporary in nature than the buildings to which they are affixed. For example, if a shop changes ownership, so will its signs and other aspects of its decoration. If regulations concerning language policy are changed, the signs may be revised. Advertising campaigns may prompt the appearance and disappearance of billboards and other displays. Some displays may be seasonal in nature. Upon the glass-and-concrete canvass of the city, its commercial and administrative signage reveals a temporal dynamism. Thus a city's linguistic and semiotic landscape can provide evidence of change on a faster scale than its buildings do, but on a slower scale than the day-to-day media of newspapers, brochures and other unaffixed matter.

# 2.3 Geosemiotic Indexicality

In their book *Discourses in place: Language in the material world*, Scollon and Scollon (2003) explore and classify the types of discourse data provided in the linguistic landscape of an urban context. They define their approach as "geosemiotics", thus offering an extended understanding of linguistic landscape in which the meaning of signs and other kinds of symbolic activity is seen as situated in the locality and its cultural milieu. Geosemiotics is "the study of social meaning of the material placement of signs and discourses and of our actions in the material world" (Scollon and Scollon 2003, p. 2).

A key concept in Scollon and Scollon's (2003) study of "geosemiotics" is "emplacement". They extend the framework of linguistic landscape beyond "decontextualized" discourse such as brand names that could appear similar in any locality, and beyond a focus solely on language within the "frame" of the sign, to consider the meaning of the placement of the sign. A sign's placement is indexical of its contextual referent, above and beyond its textual referent:

Whether or not a sign is an icon, a symbol, or an index [cf. Peirce 1955, cited in Scollon and Scollon 2003, p. 3], there is a major aspect of its meaning that is produced only through the placement of that sign in the real world in contiguity with other objects in that world. This is the focus of the field of geosemiotics (Scollon and Scollon 2003, p. 30).

In addition, various aspects of a sign's design, beyond the words themselves, can be analyzed semiotically as indexing the cultural context. For example, within Chinese written language, a choice is possible between traditional characters (used in Hong Kong, Macao and Taiwan) and simplified characters (used in mainland China and Singapore). In their research, Scollon and Scollon (2003, p. 133) found that they and their research assistants were able to find only one shop "in the year following the political change in Hong Kong [i.e., 1997] which was using simplified writing. [...] [T]raditional Chinese writing in Hong Kong indexes Hong Kong – that is the way Chinese is written here." Finding simplified characters on signs in Hong Kong was somehow anomalous, out of the local cultural context, even though Hong Kong had returned to (mainland) Chinese sovereignty.

In this study, I adopt Scollon and Scollon's (2003) insight of geosemiotics, that the interpretation of signs is contextualized within their locality. Moreover, I adopt

their framework in order to study and gain insight into the locality, rather than into the signs themselves; in this regard I differ from the purpose of Scollon and Scollon's study, which was to construct a system of classification for discourses present within an urban landscape. I also differ from Scollon and Scollon, as discussed below with reference to Chmielewska (2010), in that I am acutely aware of the subjective nature of the process of interpretation, as that of interaction between reader and text. I therefore do not discard the authorial "I" from the researcher/reader's eye.

#### 2.4 Reading the City: Semiotic Analysis as Interactive Interpretation

In the closing chapter of a collection of studies of semiotic landscapes (Jaworski and Thurlow 2010), Chmielewska (2010) points to the subjective nature of the process of interpretation, as a reader (whether local or tourist) navigates the texts of a city. With reference to the semiotics of Karl Bühler (1934/1990, cited in Chmielewska 2010, p. 276), Chmielewska points out that the process of interpretation is a semiotic triad which crucially involves the reader, rather than a flat decoding of a Saussurean signifier-signified dyad. She compares her own readings in two vastly different but comparable contexts: on the one hand, visiting post-communist Poland as a returnee from abroad, finding strange what once was familiar, and on the other hand, visiting neo-capitalist China as a European tourist entirely unfamiliar with the context, who encounters telling markers of globalization, such as billboards and brand names, against a backdrop of undecipherable Chinese characters. In this way, "[t]he image and its reading rely on the reader's knowledge of the context outside the frame, the specific spatial, material and cultural array as well as the language and the setting of the display" (Chmielewska 2010, p. 286). Whether local or tourist, naïve viewer or researcher, each person brings his or her own subjectivity to reading the discourse of the city:

If we understand an object merely through its images (representation) we inevitably lift it from its context and abstract its surface(s), consequently disregarding a possibility of meaning present in the very attachment of the sign to place [...]

To consider meaning in situ we need to [...allow] for our distinct positions, discourses surrounding the particular locale and their specific linguistic and symbolic contexts, the singularity and subjectivity of the place (Chmielewska 2010, p. 289).

#### 3 Methodology

#### 3.1 Delimiting the Data

One methodological problem which presents itself in linguistic landscape studies is the choice of data set. In some instances in existing studies, data are chosen impressionistically, i.e., when a particular sign makes an impression on the researcher as being worthy of observation and commentary. In other instances, data sets are chosen systematically so as to enable some sort of comparison. For example, Scollon and Scollon (2003) compare signs found on major street intersections in different parts of the world (a systematic comparison that yields their "grammar" of classification), but also include impressionistically chosen signs, e.g., with right-to-left writing, when relevant to the analysis (Scollon and Scollon 2003, p. 5). In the case of my study of Macao, I wanted the data set to be representative of the city, to be "social" as well as "linguistic". One complication is that Macao has changed so much recently that it is difficult to delimit what can be considered most representative. Nevertheless, the main street of the historic city centre seemed a logical place to start. In future studies, other streets or other parts of the city could be compared to it as a kind of yardstick. Future studies could also take a longitudinal approach by comparing different points in time on the same street, to document its sociolinguistic change.

The street, Avenida de Almeida Ribeiro, officially named after the Portuguese Minister for the Colonies (1928–1935) Artur Rodrigues de Almeida Ribeiro (1865–1943), is nicknamed "San Ma Lo", which means "New Avenue" (Wordie 2013, p. 351). It was constructed in the 1920s to open up the traffic flow through the city centre, connecting the shoreline of Avenida da Praia Grande (which at present, since the city's land reclamation, is no longer the prime waterfront) with the Inner Harbour, which was at that time the major commercial waterway. To this day, it is one of the two major tourist destinations of Macao (the other being the huge resort-casinos on the reclaimed land of the Cotai Strip, which rivals the Las Vegas Strip in global importance). Any tourist who is still interested in Macao's history first heads to San Ma Lo and its adjoining Largo do Senado ("Senado Square"), which is a beautiful pedestrian area with many historic buildings that have been inscribed onto the UNESCO World Heritage List. Because of its attractive shopping, romantic ambience and sentimental value, local residents also flock to this area.

The street sign of San Ma Lo is worthy of commentary in itself (Fig. 1). On the sign, we see the name inscribed three times: above, in traditional Chinese characters; below, in Portuguese; and in parentheses, the popular short name "San Ma Lo" in traditional Chinese characters, with no Western transliteration and no Portuguese equivalent. The colour, style and material of the sign are Portuguese tiles called azulejos, referencing both Portuguese and Portuguese colonial culture. In Lisbon, the capital of Portugal, there is a museum of azulejos (Museu Nacional do Azulejo), which are a ubiquitous architectural motif in Portugal; the origins of blue-and-white ceramic glaze date back both to the (Arab) Moorish influence on the Iberian Peninsula and to the Maritime Silk Road of trade with China and the Orient, which was conducted in large part by the Portuguese in colonial times (Azulejo n.d.). In Macao, azulejos street signs are also ubiquitous – not as an import and not for the tourists' benefit alone, but as a cultural marker of the Portuguese-Chinese hybridity. At the same time, it is noteworthy that the ultimate cultural appropriation of this sign is the parenthetical local Chinese nickname of the street with no equivalent in Portuguese.



Fig. 1 Street sign of Avenida de Almeida Ribeiro on Portuguese-style blue tiles (azulejos)

#### 3.2 Data Collection

I gathered the data in the manner of a naturalistic participant-observer, over a short time tranche of December 9th-10th, 2014, by snapping pictures with my (Sony Experia) mobile phone just as the hundreds of tourists do every day. I aroused no curiosity, commentary or security concerns whatsoever, except in one instance when taking a picture of an ATM by a bank, when a man who may or may not have been a security guard looked amused, said something and moved out of my way. On another instance, a street vendor waved to me and encouraged me by gesture to buy his product. Indeed, I think there may not be another city in the world where a person taking hundreds of pictures would be so unnoticed as in Macao. It is a photographer's and researcher's paradise.

Originally, I intended to take pictures only of street signs, but finding myself entirely undisturbed, I adopted a phenomenological approach and took approximately 1900 photographs of everything, going up and down the street several times. The street is approximately 620 m long and lends itself well to this kind of phenomenological approach. I did this because, with my researcher's "gaze" turned to attention mode, I immediately began to notice semiotic details beyond the purely linguistic, having to do with visual aspects of advertising, architecture and urban design. Hence, while I originally intended to document the sociolinguistic situation in Macao (Research Question 1), the broader second research question of Macao's socioeconomic situation emerged from the data.

I uploaded the photographs into a computer and coded them by recursively sorting emergent patterns and categories, using the alphabetical and numerical automatic sorting function of file names in Windows 2007. The resulting categories are discussed under their respective headings and subheadings in the Results section below, which offers a thick description of the data.

### 4 Results

The data are broadly categorized as illustrating spatial semiotics, visual semiotics and the linguistic landscape of multilingualism, with subcategories corresponding to the subheadings below.

# 4.1 Spatial Semiotics

### 4.1.1 Historical Layering

In architectural design, some of the old buildings show historical layering. Figure 2 shows the façade of the headquarters of the Portuguese bank Banco Nacional Ultramarino, dating back to 1926, with an add-on high-rise tower constructed in 1997. The original name of the bank on the rose-coloured colonial-style façade is in Portuguese only, while the signs of the BNU logo are in Portuguese and Chinese. In the windows, scrolling digital displays alternately show advertising in Portuguese, Chinese and English. Thus, the Portuguese past – architecturally and linguistically – is fully preserved, while overlaid with the present modern construction and trilingual communication.

Figure 3 shows an example of architectural detail from the inside of the Leal Senado ("Loyal Senate") building (now housing the Civic and Municipal Affairs Bureau). The original building, dating back to the late sixteenth century, was reconstructed more than once in its history (in 1784, 1876, 1887 and 1940), and is presently one of the structures inscribed onto the UNESCO World Heritage List of Macao's twenty-five most important historical monuments. The name "Leal Senado" ("Loyal Senate"), derives from the title "City of the Holy Name of God Macao, there is none more loyal" "Ciudad del Santo Nombre de Dios de Macao, no hay otra más leal", bestowed upon Macao by Portuguese King D. João IV in 1654 after Portugal regained independence from Spanish rule (1580–1640) to reward Macao's loyalty to Portugal (Cultural Affairs Bureau n.d.). Architectural details such as this bas-relief are incorporated into the building's present construction from earlier periods in its history.



Fig. 2 The façade of Banco Nacional Ultramarino with new glass high-rise add-on tower

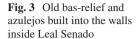
#### 4.1.2 Layout

### Open Store Fronts

Most of the shops on the street have store fronts that are either entirely open or partially open directly onto the street, as shown in Fig. 4. At night, when shutting up shop, the store fronts are screened off with pull-down scrolling steel shutters that look rather like a garage door but may be further sectioned as shown a little later in Fig. 9. The open store fronts create a sense of immediacy and invitation to potential customers passing by.

#### Arcades

The sense of invitation and comfort when shopping is also sustained by the arcades, which in a hot and humid subtropical climate protect pedestrians from both rain and sunshine, as shown in Fig. 5. The sidewalks are paved with Portuguese-style small irregularly shaped stone tiles, sometimes arranged into marine-themed design motifs, which add aesthetic attractiveness to the walking experience. The street adjoins at a right angle to the main historic square of the city, Largo do Senado (popularly known as Senado Square), which is similarly paved and entirely pedestrian, and inscribed onto the UNESCO World Heritage List. Thus the street, despite being a vehicle traffic thoroughfare, has a pleasantly welcoming pedestrian feel to it.





#### Hawker Stands

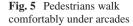
Figure 6 shows an example of a hawker stand, this particular one, with a chestnut-roasting machine, being located approximately 15 m off the main street on the historic Largo do Senado itself, at the corner of the square and a side-street which serves as an open-air market. Although not as conspicuous as the distinctive architecture or well-decorated store fronts, there are many hawker stands on street corners and side streets. They each seem to be a permanent business with a fixed location, even though the location is a small stand. At night, they are neatly closed off or shuttered.

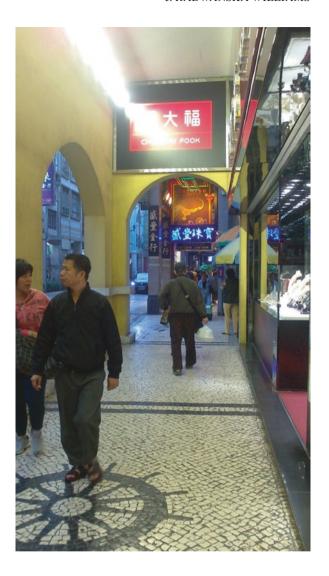
Fig. 4 Glassed-in open store front of a traditional Chinese pharmacy



#### 4.1.3 A Tale of Two Streets

Despite the historic appeal and commercial attractiveness of Avenida de Almeida Ribeiro, there is a marked contrast between the two ends of the street, even though they are only 620 m apart. The BNU headquarters (Fig. 2) is at the heart of the central business district, at an intersection where other banks, lawyers' offices and travel agents are located. The opposite end of the street forms a T-junction intersection with the Inner Harbour area. On this corner, in poignant contrast to the wellpreserved BNU building, is the gutted and dilapidated skeletal structure of the former 1920s Grande Hotel Kuoc Chai (Fig. 7), with no architectural indication of





the original identity of the building as erstwhile "one of Macao's premier places to stay" (Wordie 2013, pp. 268–269). There are signs of much renovation and construction at this more dilapidated end of the street, but this particular building seems not yet to have been reclaimed. The feel of this end of the street is of an old neighbourhood in decline, or in transition from old to new.

Across the T-junction, there is a new five-star Sofitel Macau At Ponte 16 hotel and casino facing the Inner Harbour. In contrast, the shops that are open for business are decidedly more traditional, such as the dried-seafood store approximately ten



Fig. 6 A hawker stand of roasted chestnuts in Largo do Senado

metres off on a side-street (Fig. 8). Many shops are shut off in a manner that makes it difficult to tell whether the owners are away on vacation or the business has closed down (Fig. 9).

In the chinks between the boards and shutters, one can in places glimpse construction and renovation work, such as that indicated by the hand-painted construction permit notice (in Portuguese and Chinese) in Fig. 10. Fewer pedestrians walk on this end of the street compared to the central business district, although the street is by no means deserted. Along a couple of blocks at this end of the street, there is a community centre, a budget long-stay hotel, and a busy Chinese noodle café. Despite the presence of the luxury Sofitel Macau At Ponte 16 in the Inner Harbour, this end of the street is much less glamorous than the BNU end.

#### 4.2 Visual Semiotics

### Reduplication

One interesting design feature that emerged from the data is reduplication. This is a twin repetition or multiple repetition of the same item in the arrangement of advertising or shop display. For example, many shops feature their logo or name-sign repeated two or more times on their store front. Figure 11 shows reduplication in the symmetrically recursive display of cookie gift boxes in a bakery.

Fig. 7 The gutted dilapidated Grand Hotel



# 4.2.2 Opulence

At the high end of the economic scale, the street features many expensive jewelry stores, selling gold, jade, precious stones and luxury watches. These stores utilize brand-name advertising, and crowded displays to create a sense of opulence and desire, as shown in Fig. 12.



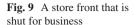
Fig. 8 Traditional Chinese dried seafood store on a side-street close to Inner Harbour

#### 4.2.3 **Economy**

On the lower end of the economic scale, some shops seem deliberately to be promoting a sense of economy, even though they may be next door to an expensive brand-name store. Figure 13 shows clothes rather haphazardly displayed, with no advertising other than the name of the shop (in transliterated Cantonese) and prominently attached price-tags.

#### 4.2.4 Use of Posters

The amount of information on display is visually and linguistically dense. The display of products and advertising is often enhanced by the use of posters which most probably are supplied by the product manufacturers, such as the advertising of brand-name watches shown in Fig. 14. In a business environment that caters to tourists, but where not all managers may be fluent in English (or in Chinese, for that matter, given the diverse ethnic mix of Macao), the widespread use of brand-name advertising creates an international aura. At the same time, it has tremendous status appeal to Chinese consumers, who are the drivers of this market even more than international tourists are. The brand-name posters bombard the eyes, vying for attention. In the Chinese context, the crowded aesthetic feels joyful and inviting, in an iconic parallelism to the often crowded nature of this street, where the flow of pedestrians can be elbow-to-elbow at peak times.





### 4.2.5 Use of Notices

In contrast to posters, which are probably mass-manufactured without regard to the particular store that might display them, notices tend to be much more specific to a particular location or circumstance. The manner of their display, however, can be similarly attention-grabbing as posters. Figure 15 shows a relocation notice prominently displayed across the entire front window of a store. Ironically, the notice appears to have been posted in June 2011, and was still in place in December 2014, without a replacement business having occupied the same premises. This seems to be indicative of the economic problems that some businesses experience as the price

Fig. 10 Hand-painted construction works permit



of buying or renting commercial premises has skyrocketed in the 15 years since the handover of Macao to China in 1999.

#### 4.3 The Dynamism of Semiotic Landscaping

As noted by Moriarty (2014), the study of linguistic landscape captures dynamic aspects of language use and social change. An example of visual dynamism occurred on December 9th-10th, 2014, as shown in Figs. 16 and 17. As part of the



Fig. 11 Reduplication as a design feature of a bakery gift box display

celebrations of the Christmas season and the 15th anniversary of the handover of Macao to China (December 20th, 2014), a giant digital display screen was erected in Largo do Senado, approximately ten metres away from the main street, to advertise the festive "Parade through Macao Latin City – Celebration of the 15th Anniversary of Macao's Handover to China" to be held on December 14th (a Sunday). The advertisement was in Chinese, Portuguese, and English. This was a temporary installation, to be taken down after the event; and it was obviously a government-sanctioned advertisement in the heart of the city's tourist area.

# 4.4 Multilingualism

A large part of the study of linguistic landscape is the evidence it provides of societal multilingualism, including language policy, language attitude and language shift. In the data description below, the extent of multilingualism in Macao is examined from the evidence of the presence of languages on street signs.

### 4.4.1 "English Only" Signs

Other than the frequently occurring prominently displayed brand-name logos, which could be termed as "international" rather than "English" in terms of linguistic classification (e.g., Omega, Gucci, Tissot, Doxa, Seiko, etc.), there are very few instances of English-only signs. Figure 18 shows an English-only decorative

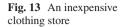
Fig. 12 Brand advertisement in a jewelry shop



display of menu items in the interior of a sit-down, somewhat upscale branch of Pizza Hut, located on the 1st (rather than ground) floor of a commercial office building near the BNU end of the street.

### 4.4.2 "Portuguese Only" Signs

Equally scant is the presence of Portuguese-only signs, the emplacement of which indicates that they are vestigial of the colonial era, such as the original sign on the BNU façade (Fig. 2). Figure 19 shows a stone plaque built into the outside wall of





the Leal Senado building, commemorating the latest major renovation of the building which took place in 1939–1940.

### 4.4.3 English and Portuguese

Although the data showed no affixed signs which would include both English and Portuguese but exclude Chinese, this possible language combination, shown in Fig. 20, is on display by an enterprising newsstand hawker advertising the three daily Portuguese and three daily English newspapers published in Macau. The



Fig. 14 Posters advertising expensive watch brands



Fig. 15 A relocation notice posted in a shop window in 2011 is still present in 2014

display is in Largo do Senado, facing out from the store front of a small shopping mall and into the square, and serves to attract the attention of passers-by. The Chinese-language publications are on the other side of the stand, facing inward into the store to catch the gaze of shoppers leaving the shopping mall.



Fig. 16 The scaffolding for a giant digital display screen being erected on Dec 9th, 2014



Fig. 17 On Dec 10th, 2014, the giant digital screen advertises a festival to take place on Dec 14th

# 4.4.4 "Chinese Only" Signs

Somewhat surprisingly, the data from this street did not show many instances of Chinese-only signs, perhaps because it is the main street in the tourist-frequented historical heritage area of the city. One surmises that side-streets would have a higher frequency of Chinese-only signs, such as the store front of the dried seafood shop in Fig. 8. Below, Fig. 21 shows a "closed" sign across the door of a small



Fig. 18 An English-only sign advertising the menu inside Pizza Hut



Fig. 19 A Portuguese-only sign dating to 1940 commemorates the renovation of Leal Senado

restaurant. Figure 22 shows an ICBC (Industrial and Commercial Bank of China) poster advertising the sale of coins commemorating the 15th anniversary of the handover of Macao to China. The poster is in Chinese only, even though international tourists to Macao might be potential customers interested in buying such a coin set. At the bottom of the poster, next to the ICBC logo, the name of the bank appears in simplified Chinese characters, but otherwise, the poster uses traditional characters.



Fig. 20 A newsstand hawker display showing Portuguese and English daily newspapers

### 4.4.5 English/Chinese (English-Prominent) Signs

The majority of signs on the main street include more than one language from the trilingual mix of Chinese, Portuguese and English, in various proportions and combinations. Figure 23 shows a bakery on the corner of Avenida de Almeida Ribeiro and Largo do Senado, advertising its success prominently in English, while its name and logo appear above the shop in transliterated Cantonese and in Chinese characters, with the English translation "Koi Kei Bakery" less prominent under the Chinese logo.

# 4.4.6 Chinese/English (Chinese-Prominent) Signs

Figure 24 shows a staff recruitment poster for a jewelry chain store, with encouraging graphics showing a career ladder and photographs of staff training. The poster is entirely in Chinese, but the word "recruitment" appears bilingually, in Chinese and English. The inclusion of the English word suggests professionalism, as the local workforce is expected to have some knowledge of English to be able to deal with international customers.

Fig. 21 A "closed" sign in Chinese only



#### 4.4.7 **Mixed Code**

In the names of businesses that appear on street signs, sometimes mixed code is used. Figure 25 shows a sign displaying the name and logo of a pharmacy, with Chinese characters prominent, then the name in transliterated Cantonese, the word "farmacia" in Portuguese and "Chinese Co." in English.

**Fig. 22** A bank poster advertising commemorative coins



# 4.4.8 Chinese/Portuguese Signs

In terms of language policy, the official languages of Macao are Chinese and Portuguese. Figure 26 shows this policy being implemented inside the window of a bus, displaying the sign meaning "exact fare" in Chinese and Portuguese, but not in English, despite the fact that tourists would benefit from English signage on the transport system. It is not the case that English signs are prohibited in municipal services; rather, they are not required, and thus are often absent. The bus system is run by several private companies contracted and regulated (even subsidized) by the government of Macao (Lai 2015).

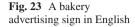
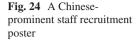
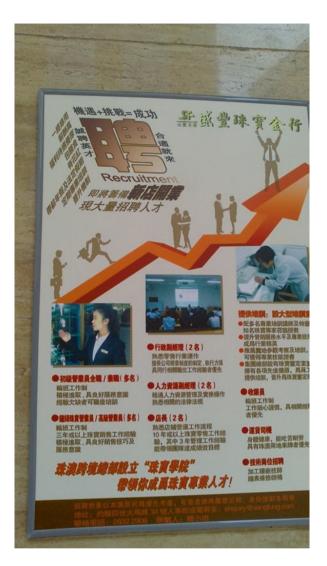




Figure 27 shows what is in fact a very attractive stamp collection display at the General Post Office on Largo do Senado, which would be of interest to international tourists, as the stamps are beautifully presented in commemorative envelopes and albums. However, the sign on the window is in Chinese and Portuguese only, and English speakers would have to rely on the visual sign of the logo, the stamp artifacts themselves, and their knowledge of the similar English word "philately" signifying stamp collecting.





### 4.4.9 Chinese/Portuguese/English Signs

Despite a plethora of bilingual signs in Chinese and English or Chinese and Portuguese, the data show surprisingly few signs featuring all three languages. The signs that do contain all three languages are somewhat top-down in nature, indicating a high level of professionalism and effort in their manufacture. The two main instances are given below in Figs. 28 and 29, as discussed below.



Fig. 25 A Chinese-prominent sign showing name in Chinese-Portuguese-English mixed code

### Government Signs

Outside the General Post Office in Largo do Senado, there is a prominently displayed large map of the city, obviously intended to be helpful to tourists. The map is trilingual in Chinese, Portuguese and English. Interestingly, the Chinese text contains both traditional and simplified characters. Traditional characters are used in Macao, Hong Kong and Taiwan; elsewhere on this street, Chinese is written using traditional characters. Simplified characters are used in mainland China and Singapore; since a large part of the tourists to Macao are from mainland China, this would be very helpful to them. Figure 28 shows the text at the bottom of the map, which advertises four different historical walking tours arranged by the Macau Tourism Board.

### Commercial/Regulatory Signs

Another example of a trilingual sign is shown in Fig. 29. This is an official certificate issued by a commercial regulatory body, the Macau Goldsmith's Guild, to ensure the compliance of the jewelry shop with professional regulations.

#### 4.4.10 Signs in Other Languages

Besides the trilingual mix of Chinese, Portuguese and English, there is limited evidence of the presence of other languages on public signage. The choice of additional language appears to be at the discretion of business owners, according to their own

Fig. 26 "Exact fare" bus window display in Chinese and Portuguese



linguistic competence and their target clientele. Fig. 30 shows a sign advertising a private medical office. The sign is in mixed code transliterated Cantonese and Portuguese ("Dr. Fong Mei Ha Medica", where Fong Mei Ha is the name of the doctor), Chinese characters and Thai script. It is posted twice – on the building and above the street – and the second instance also contains a phone number. The original painted phone number has been pasted over with a newer phone number, probably indicating that the business has existed for a long time, and is still operational. The medical doctor's office is not on street level; presumably it is within the building itself, or in the vicinity, and patients can contact the doctor by phone to make an appointment.

Fig. 27 Post office commemorative stamps display in Chinese and Portuguese



Figures 31 and 32 show the signage on an Islamic restaurant, the owners of which are a Han-Uyghur mixed couple from Xinjiang Uyghur Autonomous Region in northwestern China. Above the store front and in the window, the restaurant advertises in traditional Chinese characters, Arabic script and English, and includes the words "Islam" and "Halal". There are Islamic graphic motifs, showing desert sands, a camel caravan, and pointed arches characteristic of Islamic-style architecture. Prominently displayed in the window, there are also pictures of some of the dishes on offer on the menu. The door to the restaurant is located in a side street approximately eight metres from the main street. A second sign above the street faces the main street, and features the word "Halal" (prominently), Chinese



Fig. 28 Macau Tourism Board information about historical walking tours



Fig. 29 Jewelry shop window display of Macau Goldsmith's Guild certification for 2014

characters (prominently), Arabic script (at the bottom of the sign, non-prominently) and the name of the restaurant in run-on Portuguese (with no spaces between words), "Estabelecimento de Comidas Lou Lan Islāmico", the equivalent of the English wording "Lou Lan Islam Restaurant" that appears on the store front. A phone number is also given on the street sign.

Fig. 30 Medical doctor advertising in Chinese and Thai



#### **Discussion** 5

#### Archeology of the Present: Time Strata and Evidence *5.1* of Change

The historical layering of past and present in the spatial layout, architectural detail and visual design create an archaeology of the present. On the one hand, the past is brought into the present moment – for example, the building of Leal Senado, now renamed the Civic and Municipal Affairs Bureau, hearkens back, through several



Fig. 31 Shop front of Lou Lan Islam Restaurant including Arabic script, Chinese and English

renovations, to the very beginning of the history of the city. It stands in the place it has historically stood; incorporated into its walls are vestiges of its past. On the other hand, the present moment extends into the uncertain future. There will be new buildings, shops and signs, as the city is developing dynamically. The public signage and the street's spatial and visual semiotics are in dynamic "motion" through time. At any particular point (day) in time, a slice of time is captured like a geological or archeological stratum. Since the slice is temporal, there is no literal archeological excavation; only photography captures the moment.

The "slice of time" methodology does have some drawbacks. Only a longitudinal comparison would produce firm evidence of change. Statements about trends, e.g., the movement towards a greater presence of English in Macao's multilingual mix, are conjectural unless supported by longitudinal data. With this caveat, my conjecture is that my data supports a trend towards multilingualism, with English as a lingua franca firmly a part of the mix, rather than simply a shift away from Portuguese. On the public signage, there is a visible and widespread presence of Portuguese in a bilingual or trilingual context, even though very few Portugueseonly signs remain. There are also visible efforts at maintenance and promotion of Portuguese language and Lusophone culture, as evidenced by Portuguese daily newspapers and Lusophone cultural festivals. Also, surprisingly, at least on the main street, there are few Chinese-only signs, indicating a preference for bilingualism/ multilingualism rather than monolingualism. Commercial signage is mostly bilingual in Chinese and English, while government-produced informational and regulatory signs are either bilingual in Chinese and Portuguese, or trilingual in Chinese, Portuguese and English. Here and there, in a commercial (bottom-up) context, other languages appear, as in the case of Thai and Uyghur in my data.

Fig. 32 Restaurant sign includes Portuguese, Chinese and Arabic script (Uyghur)



### 5.2 Material Semiotics: Indexicality Pointing at Socioeconomic Megatrends

If I had not adopted a phenomenological approach of taking snapshots of all details of the street – textual, spatial and visual – I might have missed the big picture of materially emplaced semiotics. I started out being interested in the multilingual mix of Macao and its tendencies, but I ended up also becoming more deeply aware of the architectural and commercial transformations of the city. Following Scollon and Scollon's (2003) idea of emplacement, I started out looking at the main street as being a place that must by assumption be quite representative of the city as a whole.

However, I found some anomalies, or data contrary to my expectations of representativeness, such as the boarded up shops on the less frequented end of the street, which piqued my interest in the significance of the total layout of the street and the types of shops and advertising displays. Macao is a city that is reinventing itself, and the imbalance between the different ends of the street is, on a micro-scale, indicative of the megatrends of the city's socioeconomic transformation.

San Ma Lo was originally built in the 1920s as an artery through the heart of the city. Before the land reclamation that added substantially to the area of Macao Peninsula (Kvan and Karakiewicz n.d.), this street connected its two most active shores – Praia Grande and the Inner Harbour. To this day, it is an important artery, with many bus routes going through it. However, it is not the only main street any more, and moreover, the entire centre of gravity of the city within the past few years (since the opening of the Venetian Hotel Resort and Casino in 2007) has been shifting towards the Cotai Strip, an area that rivals the Las Vegas Strip and that is being built entirely on reclaimed land on a land bridge connecting the islands of Coloane and Taipa, far away from the historic city centre. In a sense, the Cotai Strip has no history – it has only the present and the future. San Ma Lo, by contrast, is the epitome of history. Thus, its present reveals tensions between the historical past and the pull of fast-paced change.

To appreciate how semiotics can help us to understand socioeconomic change, let us examine the concept of indexicality. In Scollon and Scollon's (2003, pp. 2–6) conception, emplacement embodies indexicality, with reference to Peirce's tripartite semiotics of icon, index and symbol. Originally, in Peirce's (1955, pp. 102–103, 107-111) semiotics, an index points to something beyond itself to which it has a physical causal relationship. For example, a painted portrait of a person is an icon because it resembles that person; but a photograph of a person in addition to being an icon is an index, because light waves physically travelled (by reflection rather than emanation) from the person's face to the photograph in the instant that it was taken, their impact producing the image on the film or digital imprint. Because of the quality of physical connection, an index can come into being without direct intentionality or even without human agency. Smoke is an index of fire; but fire can sometimes be caused by lightning without human agency. Likewise, fire can result from a faulty short circuit, which is due to human agency farther back in the causal chain, but not to the direct intention of causing fire. In such a case, smoke is an index, indicative of a fire taking place; it can be recognized as a sign of fire, i.e., communicate the fact of fire to a receiver, even though the sender of the sign, i.e., the fire itself, has no direct intentionality of communication. Applying the above explication of the nature of an index to the idea of emplacement, we can distinguish between intentional vs. unintended signification. The latter in turn becomes helpful in the analysis of the big picture of socioeconomic megatrends.

Let us take as an example the relocation notice in Fig. 15. The communicative intention of the sign by the people who put it up was to inform customers of the relocation of the premises of the business and to attract them to the new location by giving obvious and accurate information. The obviousness of the information is

iconically represented by the large size of the sign, which occupies the entire store window. However, the material placement of the sign – both spatial and temporal – indexes a significance beyond the conscious communicative intent of the sender. The sign had been put up in June 2011 and had not yet been taken down in December 2014 at the time of the data collection. This means that the owner of the commercial premises where the sign was displayed had not yet found a new tenant, even in the space of more than 3 years. One would expect that a main street location is a fantastic one for a business, and yet the overly lengthy duration of the placement of the sign – more than 3 years, which surely was originally unintended – indicates that it is difficult, at the present time (and continuing into the uncertain future), for this location to be financially viable for both owner and tenant, otherwise the premises would already be re-occupied. The physical location on the main street is somehow causally connected to the loss of economic viability, as evidenced by the length of time the sign has been in the window. This is what I mean by the semiotic indexing of socioeconomic megatrends. A semiotic analysis has the potential to inferentially reveal the significance of various kinds of symbolic human activity, including not only intentional meanings, but also those meanings and consequences that lie beyond the intention of the original sender-communicator.

### Conclusion

The small but vibrant territory of Macao, a Portuguese colony since 1557, has seen many changes since its handover to mainland China in 1999. Macao is multicultural in its heritage, and its economy relies on tourism. Its socioeconomic transformation since the handover has been meteoric, with unprecedented GDP growth. At the same time, the city has painstakingly preserved its quaint and unique heritage, especially in the architectural aspect of the historic city centre, with twenty-five buildings inscribed onto the UNESCO World Heritage list. The city's population has grown by at least 50%, absorbing human resources attracted by the burgeoning casino gaming industry. These two vectors of conservation and globalization pose challenges to the communication and livelihood needs of its inhabitants.

In this study, I have used linguistic landscape methodology, with a single-street data collection design, to research the sociolinguistic situation (RQ1) and socioeconomic situation (RQ2) of Macao. The inferences gained therefrom are limited by the data set and by my own subjectivity and background knowledge as a researcher. Nevertheless, my classification and interpretation of the data has allowed for some generalizations. In my "reading of the city", in response to the first research question, the following generalizations can be made. Firstly, there is a ubiquitous multilingualism, incorporating English as a Lingua Franca (ELF)/ English as an International Language (EIL) and Mandarin, in addition to Cantonese and Portuguese. While my methodology is from a slice of time, from my background knowledge I would posit that this is evidence of additive multilingualism, with an

increase in English and Mandarin since the handover, no decrease in Cantonese, and a slight decrease in Portuguese. Secondly, there is maintenance/reappropriation of Lusophone/Macanese/Portuguese culture as a "glocal" (global/local juncture) identity marker. The official promotion of Macao as a "Latin City" (displayed on the video screen in Senado Square on 10th December, 2014, Fig. 17) as part of the 15th anniversary of the handover to the mainland was particularly striking, because it stands in contrast to the disavowals of the colonial heritage of Hong Kong by mainland authorities in the wake of the pro-democracy Occupy Central demonstrations occurring simultaneously (28th September – 15th December, 2014). This promotion of Portuguese by the authorities counteracts the decline in the use of Portuguese by the population. Evidently, the preservation of Portuguese language and culture is seen as one of the communicational challenges for Macao, as part of its identity and also its contribution to China as a whole, with Macao acting as a gateway between China and Portuguese-speaking countries.

In response to the second research question, my reading is that the megatrends of tourism/gaming/capitalism are impacting the socioeconomic microtrends at different ends of the historic main street, as inferred from the indexicality of the spatial and visual semiotics. Against the backdrop of government policies, such as the promotion of the gaming industry and the conservation of Portuguese heritage, individual business owners, architects, designers and decorators make their own choices. The sum of these choices is evident in the look of the city, its layout, advertising, and the presence or absence of various businesses. Over some length of time, this aggregate of choices changes dynamically. The economic demands of tourists and locals influence the supply of goods and services. In this regard, and somewhat serendipitously, I found that small businesses are struggling to make ends meet at the less frequented end of the street. This is evidence of a socioeconomic challenge for Macao, despite its impressive prosperity.

In recent history, with the growth of urbanization, cities have increasingly become the prime human habitat. As Chmielewska (2010, p. 289) points out, signs are affixed onto the city's "surfaces". These surfaces, the city's buildings and spaces, are its material texture, like the pages of a book, upon which the signs are affixed or written. However, unlike a book's flat blank pages, the city's surfaces are in and of themselves integrally constitutive of the meanings and functionalities indexed by the signs. Moreover, in extending the scope of investigation to spatial and visual semiotics, I have also endeavoured to show that the non-verbal aspects of the city's indexicality are to some extent self-referential. The boarded-up shops signify their own demise. The opulence vs. economy attract different market segments of customers. Historical layering of architectural features encodes cultural time. The plethora of meanings embodies the cityscape and is constitutive of it. Among the surfaces and signs, human bodies wander, eyes gaze, minds wonder. In the cubist world of today's space and time, the webs of our contemporary existence are defined.

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