On the analysis of the neological resultative construction suffixed with *-iser* and -化 [-huà] in contemporary media

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1 Introduction

Both the French suffix -iser and the Chinese suffix -化 [-huà] have the potential to construct the meaning of "make < patient > become a state" (Fradin, 2003: 296; Zhang & Song, 2007 : 105). In other words, it is reasonable to conjecture that these two verbal suffixes are able to lead and form resultative constructions within the framework of the Construction Grammar (e.g. Goldberg, 1995; Goldberg & Jackendoff, 2004). In the post-2000s, with the popularity of the Internet, a large number of neologisms conforming to the structures [[X]Adj./N. -iser]V. and $[[X]_{Adj./N.}$ -化 $[-huà]]_{V.}$ such as googliser, neymariser, 精准化 ([jīng zhǔn huǎ]), 微信化 ([wēi xìn huà]) and etc., enter the community. Thus, which resultative sub-constructions are interpreted by these verbal suffixed neologisms in French and in Chinese? Can -iser and -{\lambda [-hu\angle] interpret the same resultative sub-constructions? In order to answer these questions, guided by the Cognitive Construction Grammar (e.g. Goldberg, 1995; Bouveret & Legallois, 2012) and Construction Morphology (e.g. Booij, 2010; Booij & Audring, 2017), we qualitatively study verbal neologisms suffixed with -iser and - 化 [huà] appearing and diffusing after the year 2000 in media discourse and identify the neological resultative sub-constructions explained by these two suffixes. The result shows that -iser and -化 [-huà] are able to interpret the same resultative sub-constructions.

2 Data

The neologisms allow us to understand the derivational process in its most regular form, without the semantic opacity that occurs with lexicalization (Huyghe & Lombard, 2022: 25). In order to show the relationship between French resultative constructions suffixed with *-iser* and Chinese ones suffixed with *-ike* [huà], based on written media texts from 2000 to 2022, we construct a corpus of the verbal neologisms derived by these two suffixes. The Chinese metadata are from the traditional media *People's Daily*¹, *Nanfang Daily*², and the modern media *Sina weibo*³; while the French metadata comes from both traditional and new media: all French newspapers on the *Europresse*⁴ platform and tweets from *Twitter*⁵ (e.g. Daoust, 2017).

More precisely, the constitution of the corpus can be described as follows. Firstly, thanks to the *Jieba* (Sun, 2012) and *Spacy* (Honnibal & Moutani, 2017), two Python machine learning libraries, we automatically select all French terms ending in the morpheme *-iser* and its inflections, and Chinese terms ending in the character -{½ [huà]. In our metadata, we extract 1427 Chinese terms and 2627 French terms. Secondly, we semi-automatically delete terms that are irrelevant to our research. On the one hand, we semi-automatically eliminate faulty forms, non-suffixed forms, suffixed non-verbal terms, and hapaxes separately. On the other

¹http://www.people.com.cn

²https://epaper.southcn.com

³https://m.weibo.cn

⁴https://nouveau.europresse.com

⁵https://twitter.com

hand, we remove terms that appear and diffuse before the year 2000. For French, by referring to the *Google Ngram* platform (Lin *et al.*, 2012) ([1500-2019]), the *Europresse* platform ([1840 to present]), and new media *Twitter* ([2006 to present]), we date the first appearance of the terms. For Chinese, using the press platforms *Modern Newspaper in China*⁶([1840-1949]); *Chinese Digital Library*⁷ ([1946 to present]); *China Core Newspapers Full-text Database*⁸ ([2000 to present]) and the new media: *Sina Weibo* ([2009 to present]), we determine the date of the first appearance of the terms. Then we delete the terms that appear and spread before the year 2000. The terms that were the hapaxes before the year 2000 but are largely diffused after 2000, are also included in this study. Finally, we select a total of 1,200 French and 700 Chinese verbal neologisms. Thanks to the concordancer TXM (Heiden *et al.*, 2010), we extract 24000 French concordances and 9278 Chinese concordances associated with each construction. By virtue of the systematical studies of the corpus, we identify the resultative sub-constructions interpreted by these two suffixes in Chinese and French.

3 Analysis

In order to analyse and identify the resultative sub-constructions, we study separately the semantic and syntactic roles of the roots in the resultative construction. The sub-constructions are classified in terms of the different syntactic-semantic roles of the roots.

According to the semantic aspect of the constructional approach, the interpretation of the resultative construction has two sub-events: the verbal sub-event and the constructional sub-event (Goldberg & Jackendoff, 2004: 538). The verbal sub-event can play the role of indicating that the state, that the patient has acquired, is a result of a change caused by an action, rather than their own original state. The constructional sub-event plays the role of indicating which state change the agent has made to the patient. In the absence of an agent, the constructional sub-event simply denotes which state change the patient has undergone. For the neologisms conforming to the structure $[[X]_{Adi,/N}$ -iser]_V and $[[X]_{Adi,/N}$ - $\{ \ell \in \{ -hu \ \} \}_{V}$, the presence of -iser & -化 [-huà] suggests that such states are not original properties of the patient. Compared with the verbal sub-events expressing manners, the verbal sub-events completed by the suffixes in question cannot clarify the manners in which the patient obtains the new states. The new state obtained in the constructional sub-event is interpreted by the root X. When the agent occupies a place in the constructional sub-event, the phrasal resultative construction directed by the suffixed constructions is a causative-explicit resultative construction. On the other hand, when the agent is absent in the constructional sub-event, the phrasal resultative construction directed by the suffixed constructions is a causative-implicit resultative construction.

In the morphological aspect, affixes cannot possess meaning at the level of semantics and syntax independently of the derivatives. Thus, in the study of the syntactic role of the roots in the construction, we are not interested in the syntactic relationship between these roots and -iser and -iteleprical like [huà]. Rather, from the syntactic point of view, we investigate the position and syntactic role of these roots in the predication of the resultative suffixed construction. Combining this investigation with the classification between causative-explicit resultative construction and causative-implicit resultative construction (i.e. the two sub-categories obtained from the semantic aspect), according to the systematic studies of Chinese and French suffixed neologisms in the constructed corpus (see section 2), we have identified the following sub-categories:

i. When the root plays the role of the predicative in the predication, these suffixes in question form the resultative constructions of the property.

⁶http://tk.cepiec.com.cn

⁷http://www.apabi.com/jigou?pid = about&cult = CN

⁸https://kns.cnki.net/kns/brief/result.aspx?dbprefix=CCND

- (1) Causative-explicit property resultative:⁹
 - a. Il se porte alors avec veste et chemise pour chiciser la silhouette. (Challenges, 23/06/2016)
 - b. "税企通" 使 纳税服务 **[精准-化]**.(Nanfang's Daily 09/07/2014)
 - "shuìqǐtōng" shǐ nàshuìfúwù [jīngzhǔn-huà_{suff.}]
 - "ShuiQiTong"_{n.} POM Tax-Services_{n.} [Precise_{adi.}-huà._{suff.}]_{V.}
 - "ShuiQiTong" makes tax services precise.
- (2) Causative-implicit property resultative:
 - a. Un 49.3 qui macronise. (La Montagne, 24/02/2015)
 - b. 人居 环境 [低碳-化].(People's Daily, 13/03/2013)

rénjū huánjìng [dītàn-huà_{suff.}]

habitat-human_{adi.} Environment_{n.} [Low-carbon_{n.}-huà_{suff}.]_{V.}

Habitat becomes low-carbon.

- ii. When the root is not the predicative in the predication, its interpretation is supported by another additional predicate, thus acting as an *oblique complement* (OC) of the predication. Based on the semantic aspect of the "OC", we have divided this one category into two subcategories: *recipient resultative* and *means resultative*.
 - (3) Causative-explicit recipient resultative:
 - a. Cela est très lié à notre capacité de pouvoir **APIser** notre système pour donner la possibilité de s'y connecter rapidement. (IT for Business, 13/12/2021)
 - b. (他) 使 手术 [微创-化].(Nanfang's Daily 09/07/2014)
 - (tā) shǐ shǒushù [wēichuàng-huà_{suff.}]
 - (It)_{pron.} POM operation_{n.} [small_{adj.}-incision_{n.}-huà._{suff}] $_{V.}$.
 - (It) makes the operation have small incisions.
 - (4) Causative-implicit recipient resultative:
 - a. Nous faisons face aux mêmes problématiques que les banques ou les assureurs, avec des systèmes qu'il faut progressivement **APIser**. (L'Usine Nouvelle, 01/12/2022)
 - b. 东方甄选 开始 [去-辉-化].(Weibo,08/02/2023)

dongfangzhenxuán kaishí [qù-huī-huà]

DongFangZhenXuan_{company name} Begin_{v.} [pref._{neg.}-Hui_{name of person}-huà._{suff.}]_{v.}.

DongFangZhenXuan starts to become without Hui.

- (5) Causative-explicit means resultative:
 - a. Les pays des Balkans ne sauraient **euroïser** leurs économies pour contourner le traité de Maastricht en vue d'une entrée dans l'Union européenne.(Les Echos, 30/11/2004)
 - b. 苏宁 开始 将 销售 业务 [微信-化].(Sina Weibo, 16/02/2014) sūníng kāishǐ jiāng xiāoshòu yèwù [wēixìn-huà] SuNing_{n.} Begin_{v.} POM Sell_{v.} Business_{n.} [Wechat_{n.}-huà._{suff.}]_{v.} Suning starts using WeChat for sales operations
- (6) Causative-implicit means resultative:
 - a. Je suis trasnparent, avec une identité facile à Googliser. (Twitter, 19/07/2021)
 - b. 汇款 转账 [二**维码-化**].(Nanfang's Daily, 30/01/2013)

huìkuǎn zhuǎnzhàng [èrwéimǎ-huà].

Remittance_{n.} Transfer-of-account_{n.} [QR-code_{n.}-huà._{suff.}]_{v.}

Remittances and transfers are available via QR codes.

⁹In these examples, a is a French example and b is a Chinese example, POM = pre-verbal object marker.

Based on the six resultative sub-constructions identified above in French and Chinese, we propose a common schema shown in (7) for the resultative construction suffixed with *-iser* and *-*½ [-huà]. The morpho-syntactic and semantic structures are represented from left to right.

(7)<[[X_{Adj./N}]_i-iser/-{Ł [huà]]_{Vj}> ←→<[Cause [patient] to become state relating to SEM_i]_{Vj}>.

4 Discussion

Based on the constructional approach, this study analysed the syntactic-semantic roles of the roots of neologisms in contemporary media. The result allows us to conclude that there are six resultative sub-constructions suffixed with -iser and -化 [-huà] (see section 3): causative-explicit property resultative, causative-explicit property resultative, causative-explicit recipient resultative, causative-implicit recipient resultative, causative-explicit means resultative and causative-implicit means resultative. The identification of these sub-constructions and the schema shown in (7) allows further comparison of the characteristics of the resultative construction suffixed with -iser and -化 [-huà]. Moreover, this result demonstrates that the notion of construction is valuable and feasible for cross-linguistic comparison and analysis in the morphological aspect.

References

- Booij, G. 2010. Construction morphology. New York: Oxford University Press.
- Booij, G. & J. Audring. 2017. Construction morphology and the parallel architecture of grammar. *Cognitive science* 41. 277–302.
- Bouveret, M. & D. Legallois. 2012. Cognitive linguistics and the notion of construction in french studies. In M. Bouveret & D. Legallois (eds.), *Constructions in french*, 1–19. Amsterdam / Philadelphia: John Benjamins.
- Daoust, J.-F. 2017. Démocratisation de l'information : effets différenciés des médias traditionnels et des nouveaux médias. *Politique et Sociétés* 36(1). 25–46.
- Fradin, B. 2003. Nouvelle approches en morphologie. Paris: Presses Universitaires de France.
- Goldberg, A. E. 1995. *Constructions: A construction grammar approach to argument structure.* Chicago: University of Chicago Press.
- Goldberg, A.E. & R. Jackendoff. 2004. The english resultative as a family of constructions. *Language* 80. 532–568.
- Heiden, S., J. P. Magué & B. Pincemin. 2010. TXM: Une plateforme logicielle open-source pour la textométrie conception et développement. In Sergio Bolasco, Isabella Chiari & Luca Giuliano (eds.), *10th International Conference on the Statistical Analysis of Textual Data JADT 2010*, vol. 2 3, 1021–1032. Rome, Italy: Edizioni Universitarie di Lettere Economia Diritto.
- Honnibal, M. & I. Montani. 2017. *spaCy 2*: Natural language understanding with Bloom embeddings, convolutional neural networks and incremental parsing. To appear.
- Huyghe, R. & A. Lombard. 2022. Les néologismes en -age en français contemporain: héritage verbal et polysémie. *Journal of French Language Studies* 32(1). 25–47.
- Lin, Y.-R, J.-B Michel, E. Lieberman Aiden, J. Orwant, W. Brockman & S. Petrov. 2012. Syntactic annotations for the google books ngram corpus. In *Proceedings of the 50th annual meeting of the association for computational linguistics, volume 2: Demo papers (acl '12)*, .
- Sun, J.-Y. 2012. Jieba chinese word segmentation tool, *Accessed: Jun 25*: 2018.
- Zhang, Y. F. & J. Song. 2007. A research of the causative voice sentence with the chinese verbal ending hua. *Fudan Journal (Social Sciences)* 4. 105–110.