Framing Causal Events in Japanese and English

In 1930 Japan, a silent movie entitled,

(1) Nani ga kanojo o soo saseta ka what NOM she ACC so made.to.do Q 'What made her do it?'

made a sensation and achieved box-office success. This success was due in significant part to its title, which sounded astonishingly novel and eccentric, although it involved no new vocabulary nor innovative structure. What made it sound so mind-blowing was the use of an abstract subject (nani 'what') to a verb with causative morphology.

Even today, after decades of noticeable rhetorical-style changes influenced by English, it would be peculiar to construct a Japanese sentence that matched the structure of (2). A more idiomatic formulation would be along the lines of (3a-b).

- (2) The development of these services helped to consolidate the management.
- (3) a. The people who developed these services helped to consolidate the management.
 - b. In developing these services we helped to consolidate the management.

The phenomenon in question has been conceived and labeled by Japanese grammarians as *object-centeredness* vs. *event-centeredness*. A situation can be described by extracting an entity (typically the actor) as a focus and expressing the situation surrounding it (object-centered encoding), or it can be described without extracting such an entity, focusing on the entire situation (event-centered encoding). Western languages are said to prefer the former, whereas Japanese is said to favor the latter (Tokieda 1950). The object-centered encoding necessarily places focus on nouns referring to objects when unfolding accounts, whereas the event-centered encoding focuses on predicates. Therefore, the object-centeredness is also referred to as *noun-centeredness*, and the event-centeredness as *verb-centeredness* (Toyama 1973).

Sentences in (4) exemplify object/noun-centered encoding, and (5) event/verb-centered encoding:

- (4) a. Kono jijitsu no ninshiki ga mondai no kaiketsu ni kooken suru.
 - b. The recognition of this fact will contribute to the resolution of the problem.
- (5) a. Kono jijitsu ni ki ga tsukeba, mondai wa zutto kaiketsu shiyasuku naru.
 - b. If we recognize this fact, the problem will become more manageable.

A parallel opposition is that between what Ikegami (1981) refers to as BECOME-language (*naru no gengo*) vs. DO-language (*suru no gengo*). Japanese is said to be a BECOME-language, which describes the world as a changing state as a whole, rather than as an active event in which an agent achieves an act performed on or with others — the defining characteristic of the DO-language.

These typological characterizations are thought-provoking, but, to our knowledge there has been no empirical study to test their validity. This paper undertakes this long-due endeavor. The corpus we examine consists of articles from an English scientific magazine and its Japanese translation performed by professional translators. We analyze each sentence in terms of frames and frame elements developed by FrameNet, assuming that all typological differences can be reflected in differences in frame elements (e.g., Agent vs. Cause) or in frame choice (e.g., a Causation or related frames vs. Temporal-sequence frames). We inquire whether Japanese sentences are more event and predicate centered than the English counterparts, and, if that is the case, which frame elements are favored as a sentential subject.