Annotating Real Space Depiction

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What is Depiction?

Depiction is the representation of events, settings, and objects using components within one's conception of the immediate environment, or Real-Space.

The images above capture a depiction of a person colliding with another person. Depending on the context (did the person see the event, or is only the event being described) this is a code E or G depiction.

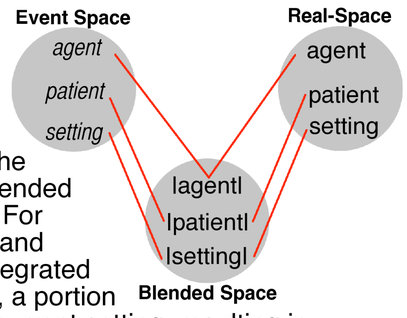
The flowchart presented here provides binary choices to guide the coders in the identification of depiction types.

Yellow squares guide coders to one of four general types of depiction. Coders begin with the question about whether signers represent a subject (or, the self; not to be confused with grammatical subject). Arrows lead to either a type of depiction (and coding instructions) or another question. If a lsubjectl is present, then coders move to the first question within the "subject regime". If a lsubjectl is not present, coders move to the next yellow square. All "no" answers (except the final one) immediately lead to a yellow square.

It is possible to depict events that do not have animate participants. Since there is no candidate subject in the event, there is nothing that the Real-Space subject can integrate with. As a result, Type F is different from subject blends in that they do not have a lsubjectl. This is an example of selective projection (Fauconnier & Turner 1994): not all Real-Space elements are integrated into the blend. Type F depictions are viewer spaces since the Real-Space vantage point is integrated with one of the many possible vantage points within the setting of the event. In the diagram representing this depiction type, instead of a filled-in figure representing the lsubjectl, we have a dotted figure representing the lvantage pointl. Type G is an example of, in Emmorey and Falgier's (1999) terms, diagrammatic space, a.k.a. FRS. This depiction type is a result of compression (Fauconnier & Turner 1994): the setting being depicted is compressed into the space in front of the signer. Neither the Real-Space subject or vantage point is integrated into this blend.

Real-Space Blending: A Review

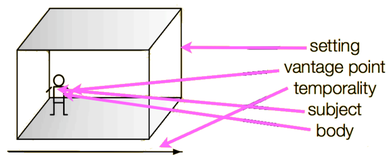
Conceptual blending analysis (Fauconnier & Turner 1994) was first applied to depiction in ASL by Liddell (1995). Concepts associated with the entity being depicted are blended with Real-Space elements. For example, the *setting*, *patient*, and *agent* of an event can be integrated with the Real-Space signer, a portion of physical space, and the current setting, resulting in lagentl, lpatientl, and lsettingl. These elements exist within a third mental space, the blend.



It is also possible to depict settings apart from events. Events, not settings, can be said to progress through time. Accordingly, setting blends (blue) are structured differently from event blends (green) and subject blends (orange) in that they do not have an integrated temporal element (represented by an arrow in the diagrams representing event depictions). Types H and I are viewer and diagrammatic setting blends, respectively.

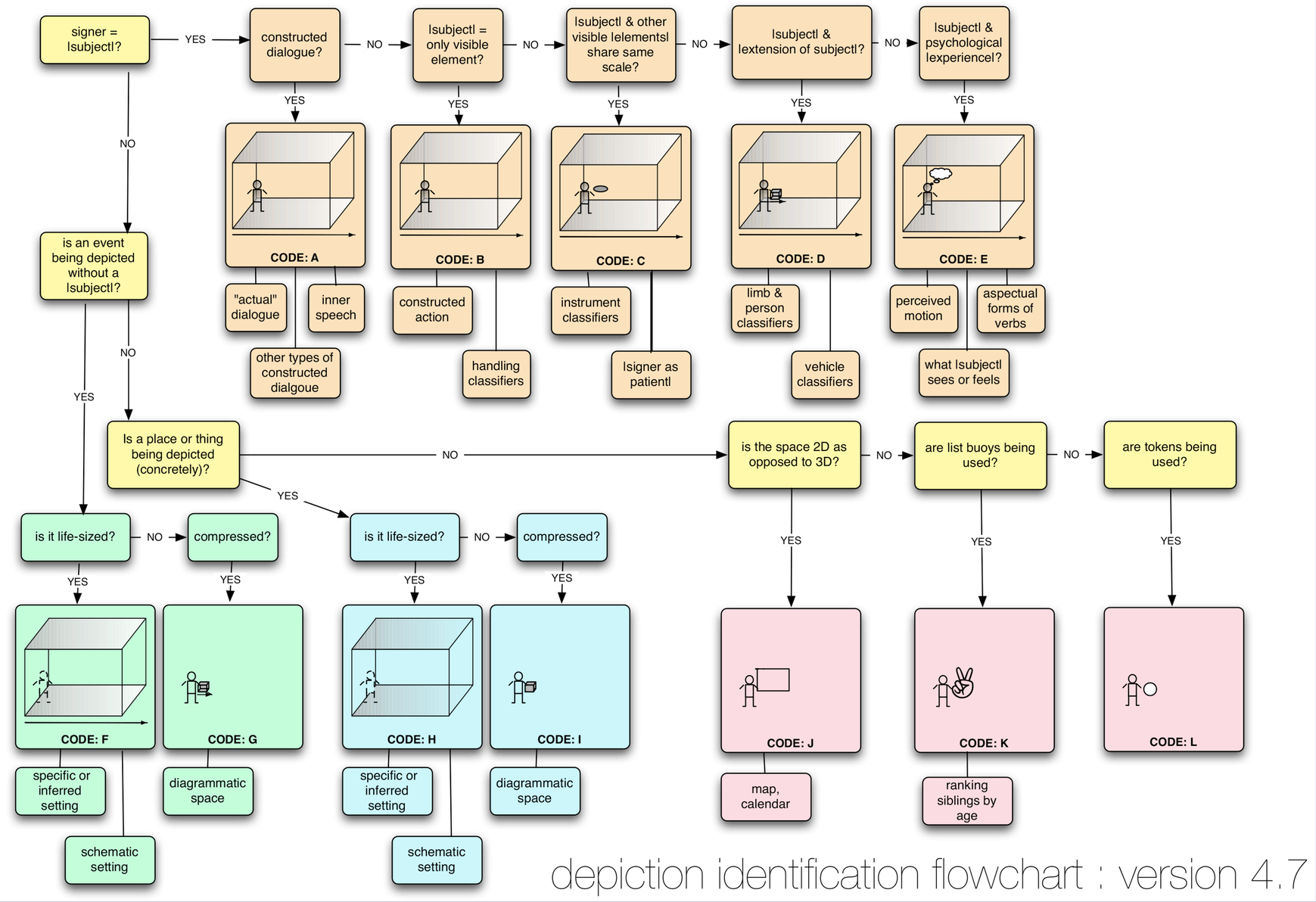
Real-Space Blending: Recent Developments

Dudis (2007) demonstrates that it is possible to describe depiction with greater precision when additional Real-Space elements and cognitive abilities are considered. These are:



Cognitive Abilities:
blending
selective projection
compression
expansion
partitioning
schematization

In our investigation, we have estimated that there are between 12 to 20 types of depiction (12 are identified in the flowchart below). To aid coding and analysis of depiction, we have been developing depiction identification procedures. The flowchart is one product of our ongoing efforts.



depiction identification flowchart : version 4.7

Depictions can be abstract. Three such types are included in the flowchart. An example of Type J has a schematic conception of a calendar mapped onto a portion of space in front of the signer. Interactive possibilities with the resulting lcalendarl is limited. The signer can't, for instance, turn this lcalendarl over or rip a lsheetl out (this would be done with Type B depictions). Examples of Type K include list buoys (Liddell 2003), whose individual fingertips can abstractly represent a number of siblings. Type L are token spaces (Liddell 2003). This is one of the most schematic depiction types that are produced by signers as they do not have physical dimensions that correspond to what they represent. More specifically, no information from the frame associated with the concept being depicted determines the dimensions of the blended element.

Orange squares are associated with subject blends. In the flowchart we identify five such blends. A - C appear to be what Morgan (1999:30) calls Shifted Referential Space (SRS), which "is mainly used to describe dialogue, actions, and thoughts of protagonists." Blends of type C have at least two distinct visible blended elements. Since these elements exist within a single viewer blend (Emmorey & Falgier 1999), they have a specific topographical relationship with each other. For example, a tapping of a shoulder can be depicted from the perspective of the patient. What is visible is the lpatientl and the lhandl of the otherwise nonvisible lagentl. Because both visible elements "share the same scale", they can interact in this way.

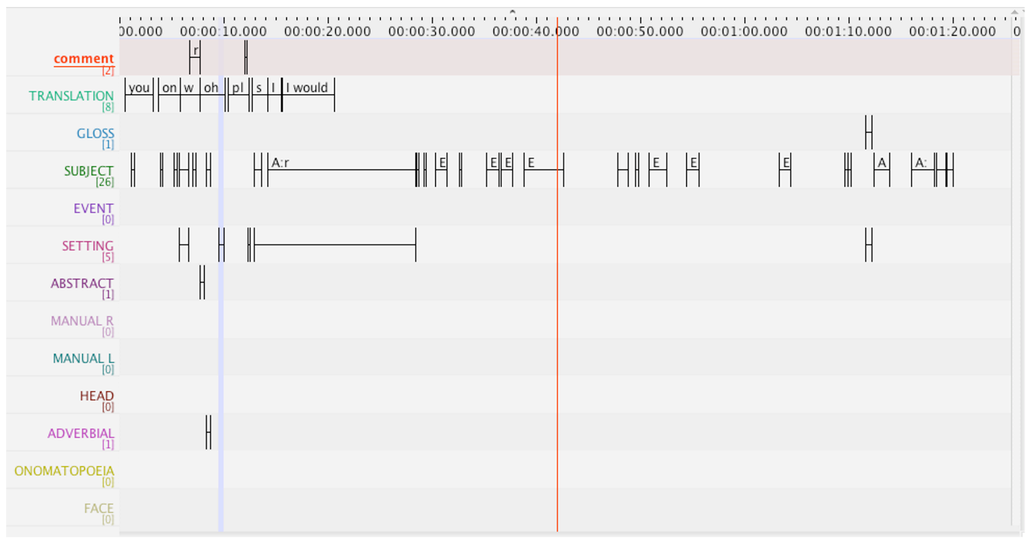
C-E are possible in part due to the cognitive ability of body partitioning (Dudis 2004). In D, the manual articulator(s) are partitioned off to depict an extension of the lsubjectl. As a result, lsubjectl and lextensionl must be in sync. For example, in a depiction of a car driver stopping suddenly, both the visible lcarl (produced using the ASL vehicle classifier) and the visible ldriverl must make sudden forward movement simultaneously. In E, the manual articulator(s) are partitioned off to depict a variety of psychological experiences. An example of this type of depiction is one in which someone sees an individual bumping into another.

Fixed Referential Space (FRS) is "used for scene setting involving topographic space [and] the movement of referents through proforms..." (Morgan 1999:30). While the two examples given for types D and E may have a FRS in addition to a SRS, it is possible to create depiction types D and E where a FRS does not appear to be evident. A depiction of a lsmiling subjectl and a visible lgrowing smilel would be categorized as a type D depiction. A depiction of perceived motion (Valli and Lucas 1990) would be categorized as a type E depiction. This suggests that we take a closer look at the nature of FRS.

ELAN Annotation

We are developing an ELAN template to annotate depiction. The template currently has 10 tiers that pertain to depiction. Four of the tiers are the general types of depiction: subject, event, setting, and abstract. The rest of the tiers annotate the use of the partitionable zones of the body (Dudis 2004) that are used to contribute to depiction. As the manual articulators can be partitioned independently of each other, there are two manual tiers. The remaining four tiers annotate the contribution of non-manual signals to depiction: non-manual adverbials, the face, onomatopoeia, and the head. Below are two screen shots demonstrating our initial (and unfinished) attempts at annotating depiction using ELAN. The image on the left annotates an 80-second portion of a conversation. On the right is an annotation of "Lone Sturdy Tree", an ASL poem by Clayton Valli. It is clear that the annotation captures with reasonable precision our observations about depiction in both the conversation and the poem. First, depiction (unsurprisingly) is found in both discourse types, and the poem utilizes depiction at a slightly higher frequency. We have also observed a tendency of depiction in the conversation to be shorter in duration than those in the poem. Another difference is found in the tendency of reactivating previously produced blends, which occurs more frequently in the poem.

The figure above illustrates a diagram format being developed to visually represent the type, duration, and frequency of depiction occurring in discourse. It is inspired by both ELAN and Morgan's (2005) dynamic space transcription. Here the diagram represents a 48-second portion of an ASL interview discussing bilingual issues within an university. Diagrammatic spaces are represented by small squares; viewer spaces by larger squares. The length of depiction is represented by the width of the squares. Note that each of the squares representing general depiction types are embedded into another square. The orange square represents a lsubjectl and is embedded into a green square, which represents ltemporalityl. Both squares are embedded into a blue square, which represents lsettingl. This embedding reflects a conceptual dependency: a subject necessarily exists within time and space, and the time of an event necessarily exists within a setting.



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