Checklist for the description of motion events

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I classify all elements used for the encoding of motion events into verbal, adnominal, and adverbal. Verbal is any verb stem that can function as a verbal predicate. Adnominal are all elements associated with the ground NP, notably case and adpositions. Verbs in adnominal position are counted as verbal as far as they can be associated with any verb. Adverbal are adverbs, verbal affixes, and particles. Thus, in the English sentence *The can ran out to the garden* all three elements are represented: verbal *ran*, adnominal *to*, and adverbal *out*. Every element can be represented several times in a clause, none of them need always be represented in motion event clauses. Some elements will not be easily classifiable into the three classes. Where this is the case, classification problems must be discussed. You need not use this terminology. Use any terminology that might be convenient.

It can be convenient (I would recommend it) to add to the description an inventory of basic elements used in motion event encoding, where all elements are given in a citation form in a consistent orthography with particularly irregular forms indicated in brackets. Here is an example of an inventory of forms

GERMAN (BERNESE) (Indo-European, Germanic; Switzerland)

Vintr: chlättere CLIMB, cho COME, fahre GO.BY.VEHICLE/MOVE.VIOLENTLY, flie FLEE, flüchte FLEE, flüge FLY, ga GO, loufe WALK, schwümme SWIM, springe RUN, sta STAND, styge SCEND, touche DIVE, wandere WALK/GO.AROUND

Vintr~Vtr: schiesse SHOOT/MOVE.VIOLENTLY, trööle ROLL

Vtr: bringe BRING, gä GIVE, ha HAVE/HOLD, füere LEAD, hole FETCH, jage CHASE, lege CAUS.LIE, lüpfe PICK.UP, nä TAKE, packe SEIZE, reiche FETCH, schicke SEND, stecke PUT.FIT, stelle CAUS.STAND, trage CARRY, tribe DRIVE/CHASE,

Vaux: (cho) cho VENTIVE, (ga) ga ANDATIVE

AVpref+V(tr)~V(tr): begägne + Dat. MEET, begleite ACCOMPANY, verreise DEPART.ON.JOURNEY, vertribe CHASE.AWAY, übercho RECEIVE

AVpref~ANfree+V(tr): aa-lege DRESS, aa-nä RECEIVE, ab-fahre DEPART.BY.VEHICLE, ab-zie UNDRESS, los-zie SETT.OFF, uf-nä RECEIVE, uf-touche EMERGE, sech zrügg-zie WITHDRAW

V+COMP+Vinf: cho z springe COME.RUNNING

ANprep+ANcase: a+Acc. TO(VERTIC), a+Dat. AT(VERTIC), bi+Dat. AT, dür+Acc. THROUGH, ga[+PLACENAME] TOWARD, i+Acc. INTO, i+Dat. IN, mit+Dat. WITH(COMIT/INSTR), na+Dat. AFTER, nach[+PLACENAME] TO, über+Acc. OVER.TO/ACROSS, über+Dat. OVER.AT, uf+Acc. ONTO, uf+Dat. ON, under+Acc. UNDER.TO, under+Dat. UNDER.AT, us+Dat. OUT.OF, vo+Dat. FROM, vor+Acc. IN.FRONT.TO, vor+Dat. IN.FRONT.TO.AT, zäme mit+Dat. TOGETHER WITH, zu(e)+Dat. TO

ANcase: DATIVE, ACCUSATIVE [only after Prepositions and for some pronouns]

ANprep+ANcase+ANpostp: gäge+Dat...zue TOWARD, mit+Dat...zäme TOGETHER.WITH, uf+Acc...zue TOWARD, vo+Dat...här FROM, vo+Dat...us(e) OUT.OF, zu+Dat...us(e) OUT.OF

ANprep+ANprep+ANcase: bis i+Acc. UNTIL INTO, bis zu+Dat. UNTIL

ANprep+N: i d Neechi NEAR.TO

AVpref~ANfree: ab DOWN/AWAY, abe DOWN, dänne AWAY, dahäre HITHER, dasume AROUND, derhär ARRIVAL, derthäre THITHER, dervo AWAY, düre THROUGH, eggäge AGAINST/MEETING, ewägg AWAY, furt AWAY, häre HITHER, hei HOME, hindenache AFTER, los INCH, mit ALONG, na/nache AFTER, übere OVER/ACROSS, uf UP, ufe UP, under DOWN(SUN), ume AROUND, umenand AROUND, us OUT, use OUT, verby BY/PAST, vorus/voruus IN.FRONT, wäg AWAY, wyter ON/FURTHER, yne IN, zäme TOGETHER, zringsetum AROUND, zrügg BACK, zueche NEAR

ADV: hinde BEHIND, wider AGAIN, zersch FIRST

ADVdem: dert THERE, hie HERE

Inventories will always be over-simplifying, incomplete, and provisional. The goal is not that the inventory should be absolutely precise in terms of lexical categories and basic meaning of terms. Rather it should give

a rough survey on the lexical and grammatical items used in motion event encoding, including all frequent and basic terms.

The following sections deal with particular complexes of questions. They can, however, be treated in any order in the description. (The checklist is slightly redundant at some places, because many questions are related to different complexes). Preferably, all questions should be explicitly answered somewhere in the description, especially also if a certain feature is not present. These may be uninteresting from the perspective of particular languages, but are most essential for typology. The negative statements may amount to more than half of the description. Use any terminology that might be convenient.

1. Adnominal marking

Adnominal marking comprises case, adpositions, any combination of adposition with case, demonstratives in adnominal position, zero marking. It is important to distinguish local roles (source *out.of/from*, place *at/in/on*, goal to, and path *along/across/through/over*), localization (on.top[with or without contact], inside, near, contact, below, in.front, behind, etc.), animacy (see Section 2), and nature or class of ground (in.liquid, in.encircled.space, hidden, in.full.space, in.hollow.space, etc.). All of these can, but need not, be expressed in adnominal position. They can be expressed in separate positions or they can be conflated (as local roles and localization in English *out of* is source+inside). If there is conflation, which combinations do occur (English has only *out of* vs. *from*, but no specific "down from" conflation)? Discuss how local roles are expressed, notably whether they are expressed by adnominal markers or by verbs (e.g., come.from, be.at, reach, pass/follow) or by adverbal markers (rare). How are secondary local roles, such as direction "toward" and border "until", expressed? Is there any distinction between more distant source/goal and closer source/goal? Is origin (where somebody is born/at home) expressed differently from source? Is there a difference between source of motion and stative source (e.g., look from)? Discuss whether there is source-goal difference or indifference, i.e., whether source and goal are always, sometimes, or never encoded differently. Is source expressed with a transitive verb ("leave") (always, sometimes, rarely)? Can there be a source and a goal in the same clause (*she went/ran from the river to the house*) or are two clauses or two verbs within one clause required (e.g., "she left river and went house")? Do certain verbs always take source or goal complements (e.g., exit, descend always with source, enter, ascend always with goal)? Are there specific go.to and come.from verbs? What is the marking of place names (*in/to/from* Leipzig)? Can place names be used with zero marking (without case or adpositions)? Are there any demonstrative adverbs occurring with grounds (e.g., "He went there Leipzig")? What are the interrogatives and demonstrative adverbs for local roles (whence, where, whither, (t)hence, (t)here, (t)hither)? Do adpositions govern case and if yes, different cases in different functions (e.g., German *in*+ACC for goal, *in*+DAT for place). Do any local role, localization, etc. markers have a transparent grammaticalization source (e.g., relational nouns such as belly, head, surface, side)?

2. Animacy

Animacy distinctions can be made according to animacy of the figure or animacy of the ground (goal/source).

  Animacy of figure: Are there any distinctions made distinguishing he goes vs. it goes. Is control relevant (enter on purpose vs. get.into inadvertently)? Does the language have any split intransitive coding and how do motion verbs split into the two classes? Are there any other animate vs. inanimate verb classes (e.g., inanimate verbs having fewer forms for TMA)? Are there any auxiliary constructions were (some) motion verbs behave differently (e.g., perfect with have vs. be)? Is there a distinction between bring.sth vs. bring so.? How is *the sun rises/sets* expressed?

  Animacy of goal: Are there any case markers or pre- or postpositions restricted to animate or human goals (or to pronouns, 1/2 person goals, proper names, kinship terms): go/come to John/him/mother/you)? Does the language have an applicative construction and is this used preferably with animate goals/sources? Do verbs in animate goal/source constructions have pronominal affixes for object or indirect object ("dative") or are they in any other way transitive (e.g., ergative marker on subject)? Compare the following constructions: go to place (inanimate), go to person, give sth to a person, send sth to a person/place). Does the language have possessive affixes and are they used on adpositions in goal/source constructions and if yes, only with

animate goal/source or also with inanimate goal/source? Can goal/source/place be expressed by subordinate or relative clauses (go where X is/stays, go to place that X is) and if yes, how frequent is that construction and is it restricted to animate goals (discuss the verb forms used in the construction). Is there any definiteness distinction in goal/place/source markers or are articles conflated with goal/place/source markers? Are there any specific go.to.animate verbs (e.g., the same verb as follow)? Are there any multi-verb constructions for animate goal (go accompany/meet/call/follow person)?

3. Deixis and other issues related to go/come verbs

List and discuss the verbs used in the domains of go, come, arrive, approach, depart, and return. Indicate if any of these verbs has a transparent source (e.g., come from a demonstrative "here"). Is any of these verbs restricted to specific forms (e.g., only imperative, only singular)? Indicate how the imperatives go! and come! are expressed. How is go/come.to.you expressed? Are the arrive/approach verbs used in come contexts (e.g., arrive to a place vs. come to me)? Is the depart verb used frequently in go contexts? How is the "pseudo-deictic" domain expressed (e.g., *They came to a place, Can you tell me how I can come to the station?*). Can the come verb be used if arrival is not implied ("We came to you, but then something happened so that we could not arrive at your place", "He came to the store and then came to me (implying that the store is closer to me than the starting point)?" Can the go expression be used in contexts such as *Where do you come from?* (non-deictic use). Is deixis expressed together with verbs such as run; if yes, by verbs or particles, affixes (e.g., run go/come, run here/there)? Is deixis distinguished with arrive (different verbs for arrive.here vs. arrive.there or arrive go vs. arrive come or by affixes)? Is deixis distinguished with return (different verbs for return.here vs. return.there or return go vs. return come or by affixes)? Is there a verb or adverbal marker for round trip (go&come.back)? Is there a verb or particle for return.home? Can go/come verbs be omitted in motion event clauses (e.g., "He to the town", "She hither from the town", "It down from the tree")?

   Discuss irregularities of motion verbs (these will usually include go and come but other verbs might be involved as well). Indicate all cases of suppletion, notably number suppletion, imperative/hortative suppletion, tense or aspect suppletion, person suppletion (e.g., 2nd person has different stem), or non-categorical suppletion, including all marginal or borderline cases of near-suppletion. Are there any specific forms/particles for *let us go/come!* ? Do some motion verbs have less or more inflectional categories than other verbs? Do some motion event clauses lack lexical verbs?

4. Displacement ("Path") in verbs and related issues

Are there any of the following verbs: enter, exit, ascend, descend, pass, cross, embark, disembark, mount/dismount vehicle, approach, assemble/come together, diverge(several.people.having.been.together.-go.in.different.directions), go.upstream, go.downstream, precede, follow, go.in.front/ahead, go.behind, proceed, etc.? List all verbs and discuss their use (some of them may be restricted or rare in use, as some English verbs listed above). Indicate whether any of these verbs is used in a transitive construction. There might be several verbs distinguishing deixis (e.g., ascend.hither, ascend.thither) or telicity (go.up.until.top vs. go.further.upward). Discuss whether any verb stem expresses more than one domain at the same time, e.g. "scend" ('ascend' and 'descend') or "exenter" ('enter' and 'exit'). Are there any verb stems intermediate between manner and path (e.g., penetrate, throng.in, enter.by.jumping.over). Are there any specific displacement verbs (e.g., ascend.within.a.village). Is any of the verbs derived from a noun (e.g., enter from 'house')? Are there any verbs restricted to shape of ground (e.g., cross.water vs. cross.non.liquid, enter.water)? Are 'ascend/descend' expressions sensitive to ground (descend.downhill, descend.through.air)? Indicate if any verb is a loanword.

5. Manner verbs and related issues

List and discuss the verbs used in the following domains: walk, walk.around/about/take.a.walk/wander, run, flee/run.away, swim, float, fly, wade, go.by.vehicle, go.on.horseback, go.by.boat. Indicate whether any verb is derived (e.g. walk from 'path/way' or 'foot') or whether any verb is a loanword. Can the "walk" verb(s) be used for go.by.vehicle? Are there different verbs for short/easy vs. long/complicated journeys (travel)? Are there any honorific verbs for kings, deities etc. going? Are there motion verbs restricted to humans, animals? Is shape of the figure expressed in verbs (e.g., a compact object moves, a long object moves)? Discuss

constructions used when displacement and manner are present at the same time (e.g., The bottle floated into the cave, The boy ran into the house).

6. Transport

It is important to distinguish directed transport (bring.to.a.place/person) vs. undirected transport (e.g., carry water [around]). List the expressions used for directed and undirected transport. Are carry vs. lead distinguished in undirected and/or directed transport (or even transport.by.vehicle)? Is there an animacy distinction (bring.person vs. bring.thing; this is similar but not identical with carry vs. lead: carry.a.child)? Is transport expressed with comitative constructions ("go/come with sth./so.") or with causative constructions ("make so./sth. go/come/enter/exit")? Do transport verbs distinguish deixis by verb stems (such as Spanish *traer* vs. *llevar*) or in multi-verb constructions ("take come/go")? Is take used in transport, if yes, for which kind of transport (generally, carry, lead, animate, inanimate, etc.)? Is there a fetch verb (note that fetch is semantically very complex: go.to.a.place&take.sth.&return) or is this domain expressed by other verbs ("go for sth.")? Are there any body part specific carry verbs: carry.on.shoulder, carry.on.head, 2.people.carry.long.object, carry.by.handle, carry.on.hip, etc.)

7. Transitive verbs

List and discuss all verbs involved in the domains of put and take. Do these express displacement (take.down, take.out, put.up, put.into, put.down) or how are these meanings expressed? How is take.away expressed (some languages have a verb for take.away.by.force)? Is posture encoded in put verbs: put.standing/sitting/lying? (Are there verbs for stand/sit/lie?). Is there any other distinction made in put verbs (put.orderly/in.a.row)? How is throw and throw.in/out/up/down expressed?

8. Adverbal markers

Are there any deictic or pseudo-deictic adverbal markers (affixes, particles): "(go/come) hither/thither/arriving/again/back"? Are there any adverbal markers for displacement: *(go/come) up/down/in/out/by* etc.? List all of them and discuss whether any of them is more common than others. If there are both adverbal markers for deixis and for displacement, are these in the same slot (conflated) or in different slots (such as German *her-ein* "hither-in"). Do any of them have transparent sources (e.g., sky, earth, house)? Are these required even if a ground phrase is present ("go in into the house")? Are there any adverbal markers indicating ground (into.liquid/fire, downhill, upstream, into empty space vs. into full space)? Are there several positions for adverbal markers and can they be combined (e.g., "in.go inside, down.go earth")? Are there adverbal markers used for walk ("go.around"), assemble "come.together"), or return ("come.back/again")? Can adverbal markers express absolute orientation ("seaward, along.beach, northward, eastward"). Are there adverbal markers indicating only localization or shape or class of ground without direction and displacement (e.g, "inside" both for 'in' and 'out')? Are adverbal markers lexicalized (restricted in use) with few verbs or can they be used freely with any motion verb? Can adverbal markers used for motion also be used to express more grammatical notions, such as aktionsart or aspect (e.g., "completely"). Are there any general adverbal markers for direction or motion?

9. Frames of reference

Discuss the nouns/adverbs used in the absolute orientation system: cardinal points (north, south, east, west) or topographical orientation (seeward, landward, along.beach, uphill, downhill). Are there any verb stems encoding absolute orientation (e.g., go.north, go.seaward)? Are there verbal affixes or particles expressing absolute orientation (perhaps combined with other meanings, e.g., down meaning also north)? Are absolute frames of reference used to express examples such as *The man is in front to the house* ("The man is north of the house" etc.)?

10. Light verb constructions and incorporation

Some languages have a restricted number of verbs and these are usually semantically light verbs such as go, be, give, see, etc. Specific events are then expressed by so called light verb constructions, consisting of an uninflected element (specifier, noun, adverb, ideophone) and a light verb, e.g. "go quickly" or "race go" or "race run" for 'run'. List all frequent light verb constructions in the domain of motion events, notably for the

domains of manner (run, flee, walk, swim, etc.) and displacement (enter, exit, ascend, descend, pass, cross, etc.).

Are there any cases of noun incorporation in motion events, notably incorporation of ground, e.g., house.enter, body.enter, boat.climb, hill.climb etc.

11. Multi-verb constructions

Discuss construction types used where more than one motion verb is used in a clause. These could be serial verb constructions, converb constructions, "cosubordination" (non-final or non-initial verbs have different, less finite inflection markers), root serialization (compound of several verbs). Are verbs or any verbforms attracted to adnominal positions (sometimes called "coverbs") for comitatives (go accompany N), instruments (take/use N put N), for goal (go reach/go.to N), source (exit/come.from N go N, be.at N go N), place (live be.at N), path (pass N go N). Are there any specific verbs for intransitive vs. transitive constructions (e.g., take bring.to N vs. go reach N, go exit N vs. take take.out N)? Is 'again' expressed by a verb return or do.again? Discuss word order for all constructions. Is depart or exit expressed by multi-verb constructions (e.g. exit go)? Is arrive expressed by multi-verb constructions (e.g., arrive come)? How is come running/run away expressed?

12. Derivational categories

Indicate which motion verbs are reflexive/middle. Is there any construction involving middle or reflexive for 'depart'? Is there any construction with "his/her/my/etc. way" ? Indicate which motion verbs contain a causative marker. Indicate which motion verbs have a repetitive (light 'again' marker, e.g. English *re-*). Indicate which verbs have an applicative marker and where applicatives are used in motion events. Discuss whether there are any iterative/frequentative motion verbs and how they are used. Are there any co-compounds or coordinate sequences of motion verbs (e.g., "go-come/go&come" for 'walk' or 'pass')? Is there any reduplication or word iteration of motion verbs and what does it express?

13. Intermediate categories

Are there any elements not easily classifiable as verbal (V), adverbal (AV), or adnominal (AN)? Some possibilities: V~AN (verbs behaving like adpositions), V~AV (e.g., "exit" = "out"), AV+V ~V (an affix that is not clearly analysable), AV~AN, AV+AN ~ AN (English *out of*), N+AN~AN (*on top of*), V+V ~ V. Can verbs (which?) also be used as nouns or other parts of speech ("zero conversion")? Are there any discontinuous verb roots (also called bipartite stems)? Are some verb stems always morphologically complex with none of the two parts showing clearly verbal behavior? Can the same verbs be used for intransitive and transitive motion (e.g., enter = put.into) and to what extent? If yes, is there any auxiliary or other grammatical element distinguishing (in)transitivity?

14. Word order

What is the word order in motion events (in terms of figure verb ground, or, subject (object) verb local NP/PP: SLV, SVL, SOVL etc.)? What is the word order of manner and displacement verbs when both are expressed (go running or run go, etc.)?

15. Text

Add a characteristic short text passage from an original text with free translation and interlineary glosses, containing as many motion events as possible.

Other motion event questionnaires

GO/COME: Ricca, Davide. 1993. *I verbi deittici di movimiento in Europa: una ricerca interlinguistica.* Firenze: La Nuova Italia.
Wilkins & Simpson: http://lingweb.eva.mpg.de/fieldtools/tools.htm http://www.spectrum.uni-bielefeld.de/Courses/Summer02/HowToMakeADictionary/questionnaire_short.html,

An example for a thorough description of space expressions:

Malotki, Ekkehart. 1979. Hopi-Raum. Eine sprachwissenschaftliche Analyse der Raumvorstellungen in der Hopi-Sprache. Tübingen: Narr.

Send any feedback about usefulness or non-usefulness of this checklist to Bernhard Wälchli. I would be particularly interested in any descriptions having made use of this checklist.