```
verbal
in-
flec-
tion
and
modal
ti-
ti-
cles
in
West-
ern
Dhuwal
djr
TURE
nu
ACCUN-
TERA
TERA
TOTAL
TOTA
nha

ACC
bäyŋu
e. g.
e. g.
e. g.
e. g.
e. g.
e. g.
in-
com-
pat-
i-
ble
ASYM-
ME-
TRY

Negation
in-
ter-
act-
ing
with
in-
flec-
tion
cat-
gory
in
West-
Dhuwal
djr
PRESENT
nu
PRESENT
nu
SAME-
SAME-
```

 $\begin{array}{c} 5 \\ \text{RE-} \\ \text{ALISED} \\ anr \\ i.e. \end{array}$ 

Interactions between negation and mood marking in Gurrgoni 8

CLASSSTEM

nanya

i nha

ru na

n lu (la)ra

n -ru-na

ma-nu-wala/-violetnha-wa



 ${}^{13}_{13} FIRST SECOND THIRD FOURTH \\ {}^{13}_{14} BAS \quad FUT \qquad {}_{1} \qquad {}_{2}$ 

Imperative force with II 18 EAR-LIER.TODAY a prior dry sea-son MOTE PAST sc.

 $\begin{array}{c} changes.^{20} \\ \S ?? \end{array}$ 

## Temporal contritributions of I and III (nontoday frame) RECENT RAST REMOTE PAST na



```
cates. ^{29}
     So
\operatorname{far}
in
this
sec-
tion,
we
have
seen
ev-
i-
dence
of
an
or-
gan-
is-
ing
prin-
ci-
ple
in
W.
Dhuwal(a)
where
all
ver-
bal
(in-
flect-
ing)
pred-
i-
cates
lex-
i-
cally
en-
code
even-
tive
(dy-
namic)
sit-
u-
a-
tions
which
are
tem-
po-
rally
bound
(i.e., have
end-
points).
prin-
ci-
ple
is
for-
mu-
lated
in
().
     verbal
\mathbf{stems}
\mathbf{a}\mathbf{s}
in-
her-
ently
even-
```

 $_{\rm in}^{\rm tive}$ 

'ipfv.I'
when
referring
to
a
presentlyholding
state.

'caus',30

de-rives

in-

flect-

ing ver-bal

pred-i-

cates with

ac-

 $\operatorname{cord}$ -

ingly even-

tive se-

man-

 ${{\rm tics.}^{31} \atop {\rm Wilkin-}}$ 

son1991 demon-

strates

the

paradig-

matic re-

la-

tion

be-

tween

these pred-i-

cates.

Α

num-

ber

of

ex-

amples

of

these

ver-bal

derivations

are

given in

Ta-ble be-

low

 $_{\rm dom\text{-}}^{\rm (pre\text{-}}$ 

i-

nantly

from Wilkin-

 $son \dot{s}$ 

descrip-

tion)

and

for-

 $\operatorname{mal}$ pro-

pos-

als

for

the

contri-

bu-

 ${\rm tions}$ 

of  $\mathbf{a}$ 

num-

ber

of  $\quad \text{these} \quad$ 

op-

era-

 ${\rm tors}$ 

aregiven in

() be $low.^{32}$ 

```
33
ii<u>.</u>
\mathrm{TH}\hspace{.01in} i
\begin{array}{l} \langle\langle\varepsilon_{s},t\rangle,\langle\varepsilon_{\epsilon},t\rangle\rangle = \\ \lambda P^{s}.\lambda e[\operatorname{BECOME}(P^{s})(e)] \end{array}
\mathrm{TH}\,i
'inch'
is
a
sit-
u-
a-
{\rm tion}
op-
er-
a-
\operatorname{tor}
which
takes
a
prop-
erty
of
states P^s \subseteq \mathcal{E}
and
re-
turns
the
\operatorname{set}
of
events \\
BE-
COME P^s \subseteq \mathcal{E}_{\epsilon}. A
se-
man-
tics
for
ku\sim-
\mathrm{TH}\,a
{\rm `tran-}
si-
{\rm tiviser'}
\mathsf{THu}_{\langle\langle\varepsilon_s,t\rangle,\langle e,\langle\varepsilon_e,t\rangle\rangle\rangle} = \lambda y \lambda P^s. \exists e[\mathsf{CAUSE}(y,\mathsf{BECOME}(P^s)(e))]
\mathrm{TH}\,u
{}^{\mbox{\tiny 'tr'}}
is
\mathbf{a}
sit-
u-
a-
tion
op-
er-
a-
\operatorname{tor}
which
{\it takes}
a
prop-
erty
of
states
 P^s
and
re-
```

turns

```
(earlier to-day).'[DB 20190405]//
```

```
ŋarra
barpuru
munh-
agu
ŋarra
luka
djiny-
ď-
jalma'
ga
roŋanmara-
ŋala
bä-
pawa
märr
ŋayi
dhu
luka
dhiyanu
bala
godar-
rmirri//
1s
yes-
ter-
day
night
1s
eat.I
crab
and
return.caus-
III
father-
dat
\mathbf{SO}
\frac{3s}{fut}
eat. I
prox.erg
mvtawy
morn-
ing//
```

ate some crab last night

```
[49]Cover 2010.^{34}
      Α
con-
se-
quence
of
an
{\rm anal}\text{-}
y-
sis
of
this
type
would
be
that,
past-
referring
ut-
ter-
ances
with
I-
morphology
must
be
un-
\operatorname{der-}
stood
"not
as
Ìo-
cat-
ing]
a
sit-
u-
a-
{\rm tion}
at
some
def-
i-
nite
point
in
the
past,
but
only
to
of-
fer
it
as
\operatorname{rel}-
e-
vant
to
the
cur-
\operatorname{rent}
sit-
u-
a-
tion",
a
se-
man-
\operatorname{tic}
do-
{\rm main}
{\rm tra}-
di-
```

tionally as-

```
pro-
noun/presupposition
\operatorname{gard-}
ing
the
re-
la-
{\rm tion}
be-
tween
\mathbf{a}
contextually-
provided
ref-
er-
ence
{\rm time}
and
the
time
of
speech),
we
are
left
\quad \text{with} \quad
dis-
junc-
tive
lex-
i-
\operatorname{cal}
en-
tries
for
\operatorname{each}
of
Ι
and
III;
se-
man-
tics
for
which
are
sketched
be-
low
in
().
pol-
y-
semy
treat-
\mathbf{ment}
\mathbf{of}
\mathbf{the}
tem-
po-
\overline{ral}
con-
tri-
bu-
tion
\mathbf{of}
Ι
and III polytons I c = \lambda t:
\{\,t\,\in\,
today' \leftrightarrow
t \circ
t_0. t
            [NONPAST]
```

 $_{\rm with}^{\rm along}$ (more vague) subjective distinction between  $`{\tt RECENT'}$ and 'NON-RECENT' [see also][]Botne2012. Both of  $\quad \text{these} \quad$ thresholds appear to be grammati- ${\it calised}$ inWD.

The

 ${\it trans-}$ 

la- ${\rm tion}$ 

of

the "Glaswe-

gian"

se-

man-

tics

for

 ${\it tense}$ 

sys-

tems

of

this

type given

 $\check{\mathrm{in}}$ (poly-

tns),

then,

appears

to

```
([e.g.,][]{\rm Cable 2013, Klecha 2016, Hayashi 2015.})^{37} That
is,
gram-
mars
that
pay
at-
ten-
tion
to
tem-
po-
ral
dis-
tinc-
tions
that
are
more
fine-
grained.
     {\bf Grammaticalised}
re-
mote-
ness
dis-
tinc-
tions,
at-
tested
across
\mathbf{a}
\quad \text{wide} \quad
sam-
ple
of
world
lan-
guages,
are
par-
tic-
u-
larly
well
rep-
re-
sented
in
Bantu
Dahl1983,Botne2012.
an
ex-
am-
ple,
Gikũyũ
([kik]
Bantu:
Cen-
\operatorname{tral}
Kenya)
is
de-
scribed
as
hav-
ing
\mathbf{a}
sys-
tem
of
\operatorname{trm}:
```

four for the

 $\quad \text{frame} \quad$ devices and contex- ${\rm tual}$ support. She also suggests "relevance"as  $\mathbf{a}$ potential criterion requiring further investigation. We willhave moreto say about this in the  $\operatorname{next}$ section (§??).
This sec- $\operatorname{sub-}$ sectionhas consid- $\operatorname{ered}$ how wd handles  $\operatorname{pred-}$ cation about events instanti- ${\rm ated}$ before  $\mathbf{the}$ day of

utter(discont) below.

Temporal discontinuity: Reference times felicitous with III do not strictly precede

those felicitous with I.discont

ous.<sup>42</sup> Ef-

fec-

tively,

it

is

an iden-

tity

func-

tion

that

"passes"

 $\bar{\mathbf{a}}$ 

ref-

er-

ence in-

dex

i,

pro-

vided

by

con-

 $\operatorname{text}$ 

(c),

up

the

deriva-

tion.

The con-

tex-

 ${\rm tual}$ 

pa-

ram-

e- $\operatorname{ter}$ 

c

is

as-

 $\operatorname{sumed}$ 

to

be  $\mathbf{a}$ 

tu-

ple

con-

 ${\rm tain}\text{-}$ ing rel-

e- $\operatorname{vant}$ 

con-

 $ext{tex-}$ 

tual

infor-

ma-

tion. On

this

ap-proach,

tem-

po-

 $\overline{ral}$ 

ref-

erence

is

provided

by

pronoun-

like

(6,0);

```
[nearly trans-
par-
ent,gray!60](3,0)
el-
lipse
[x
ra-
dius=2cm,y
ra-
dius=.9cm];
(2.75,.5)
node[color=blue]
i;
[nearly trans-
par-
ent,gray!80,xshift=0.52cm](3.5,0)
el-
lipse
[x
ra-
dius=1cm,y
ra-
dius=.6cm];
(4.45,.25)
node[color=forest]
j;
[semi-
trans-
par-
ent gray!80 wshift=0.45 cm](1.8.0)
```

```
\begin{array}{c} \text{time.}^{44} \\ \text{From} \end{array}
this,
we
can
sim-
ply
de-
rive
the
in-
com-
pat-
bil-
ity
of
III
with
PRESENT-
{\rm referring}
{\rm event}
de-
scrip-
tions:
all
non-
final
\quad \text{subin-} \quad
ter-
vals
of
(today, i*] \\
forcibly
ex-
{\rm clude}
i*.
As
a
re-
sult, NfInst(P,[today, i*), j)
yields
the
TO-
DAY
PAST
dis-
\operatorname{tri-}
bu-
tion
for
      [Prehodiernal] \\ The
то-
DAY
{\rm frame}
Fur-
ther,
the
"sub-
jec-
tive"
na-
{\rm ture}
of
the
RE-
\operatorname{CENT}
v.
RE-
MOTE
dis-
tinc-
tion
```

(shown

and

TO-

DAY

PAST

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stan-

ti-

a-

tion

 ${\rm times}$ 

then

 $_{
m emerges}$ 

as

a

re-sult

 $\quad \text{of} \quad$ 

prag-matic

block-

ing.

It is

well

 ${\rm known}$ 

that

op-po-si-

tions

be-

 ${\rm tween}$ 

spe-

cific

and

general

mean-

 ${\rm ings}$ 

give

rise

to

a di-

vi-

sion

of

prag-

matic

labour in

which

the

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eral form

is

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ally re-

 ${\it stricted}$ 

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the do-

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the

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cific form

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tional
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 bal
 paradigm
(I
(I
and
III.)
The
 \text{tem-}
 po-
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of
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 er-
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 in-
 ter-
 vals
 li-
 {\it censed}
 by
 each
 of
 these
 in-
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 tions
 (schema-
 tised
 in
 Fig-
ures
??/??/??)
 is
 un-
 \operatorname{der-}
 stood
 in
 \operatorname{terms}
 of
 a
 no-
 tion
 of
 (PRE)CONTEMPORARY dis-
 tinc-
 tion
 which
 op-
er-
 ates
 over
 ei-
 ther
 a
 hodier-
 nal
 or
 pre-
 ĥo-
 \operatorname{diernal}
 "ref-
```

 $_{\rm ence}^{\rm er\text{-}}$ 

verb

 ${\rm forms}$ 

lo-

cate

an

event within

the

P-

 $\operatorname{domain}$ 

(ac-

count-

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rate

and

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i-

cal

present

uses, where

Ø-

 $\stackrel{\sim}{\mathrm{inflection}}$ 

is

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par-

ently

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pat-

i-

ble  $\quad \text{with} \quad$ 

non-

present

time.) That

all Ø-

 $\max$ 

pred-

cates

involve

 $\operatorname{ref}$ -

er-

ence

to

events

that

oc- $\operatorname{cur}$ 

 $\hbox{``within'}$ 

the

times-

pan of

the

cog-ni-

tive

world

[that

in-

 ${\rm cludes}$ the

deic-

tic

cen-ter]"

(152).Ènd'énonciation).<sup>47</sup> To take one example, Duchet2016's Duchet2016 study of the usage domains of the Albanian [sqi] AORIST and PER-FECT sug-gests the pos-si-ble utility of this broad 'eenon- $^{cia\text{-}}_{tive}"$ di-chotomy in un- $\operatorname{der-}$ standing the distibution of  $\quad \text{these} \quad$ 

 ${\rm forms.}^{48} \\ {\rm While}$ pastreferring event descriptions in narra- ${\rm tive}$ contexts

are the

locusclas-

sicusof

the

Aorist,Duchet2016

show that,

indis-

course

contexts,

this

form

is as-

soci-

ated

with a

num- $_{\rm ber}$ 

of other

uses

in-

cluding

the de-

scrip-tion

of

presentholding

re-

sult states

and "im-

me-

di-

ate fu-

ture"ac-

complish-

ments.

The Per-

fecttra-

di-

overview.<sup>50</sup> A

sim-

i-

lar

us-

age of

the

PRES

(or

NON-

FU-

TURE)

is also pointed

out

by Stir-ling2012a, who shows

its

ex-

ten-

 $\quad \text{sive} \quad$ 

use

in

Kalaw

La-

gaw Ya

[mwp], where

it

func-

 ${\rm tions}$ 

as

a

past per-

fec-

 ${\rm tive}$ 

in

narra-

tive con-

```
Quoted
di-
a-
logue
in
a
nar-
ra-
{\bf tive}
con-
text
in-
duc-
ing
ref-
er-
ence
frame
shift//
nhanŋu
ŋändi'mirriŋunydja
waŋa-
na-
na:
+
"Go,
gäma'kama-
na
nhuma
dhu
gir-
riny'tja
mala,
nhakuna
munhd-
hur-
```

 $_{\rm The}^{\rm cles.)^{54}}$ 

de-

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of

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an-

a-

lytic

 $\check{T}MA$ 

marking

sys-

tem

in

Dhuwal-

Dhuwala

is

likely

to

be

re-

lated

tothe

emer-

gence

of

"cyclic tense"

sys-

tem

 $\quad \text{where} \quad$ 

(the

erst-

while

'pres') now

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ga-

to-

rily

co-

occurs

with

ga 'ipfv'

in

or-

 ${\rm der}$ to

en-

code

present ref-

er-

ence.

Com-

pare this

fact

to

the

incom-

pat-

bility

between

present

ref-

```
un-
\max
form,
tem-
po-
rally
neu-
\operatorname{tral}
in
its
se-
man-
tics
com-
pare
to
treat-
ments
of
the
present,
e.g.,
Fleis-
chman1990, Carruthers2012. 55
       The
fol-
low-
ing
chap-
ter
ex-
{\rm tends}
the
ac-
count
to
\Pi
and
IV
the
ir-
re-
alis
cat-
e-
gories.
       \operatorname{Modal}
in-
ter-
pre-
ta-
tion
&
NEG-
A-
TIVE
ASYM-
_{
m ME}–
\operatorname{TRY}
TRY distinguishing \langle I, III \rangle from \langle II, IV \rangle The
ba-
\operatorname{sic}
dis-
tri-
bu-
tional
{\rm facts}
for
II
and
```

 $_{\rm were}^{\rm IV}$ 

that

re-

ceive

I-

marking

in

pos-

i-

 ${\rm tive}$ 

sen-

tences

en-

 $\operatorname{cod}$ -

ing

tem-

po-

ral

ref-

er-

ence

the

present

or

re-

 $\operatorname{cent}$ 

past (Ch. ??)

in-

 ${\rm stead}$ 

re-

ceive II-

marking

un- ${\rm der}$ 

the

scope

of

nega-

tion.  $\operatorname{Each}$ 

ex-

am-

 $_{\mathrm{ple}}$ 

con-

tainsa

pred-

ica-

tion

about

the

present

or

about

the re-

 $\operatorname{cent}$ 

past

(nor-

mally

the do-

 ${\rm main}$ 

of

I, as

described

in

the

previ-

```
se-
lec-
 tion
 in
 neg-
 a-
 tive
clau. (cf. Fig. ??, p. ??.) [h][TEMPORAL
 clauses
 neg-
 a-
 tive
 {\it clauses}] Apparent
 in-
 ter-
 ac-
 tions
 be-
 tween
 tem-
 po-
 ral
 re-
 la-
 tions
 and
 re-
 al-
 ity
 sta-
 \operatorname{tus}
 in
 Djam-
 bar-
 rpuyŋu:
 cyclicty
 and
 met-
 ri-
 cal-
 ity
 un-
 \operatorname{der}
 nega-
 tion.
  [scale=1.2]
  <-
 line
 width=.5mm]
 (0,0)
 (12,0);
[left
 color=violet!15!white,
 color=orange!15!white]
 (0,0.02)
 rect-
 an-
 gle
(4.8,1.5);
[vi-
 let!10!white]
 (4.8,0.02)
 rect-
 an-
 gle
  (6.8,1.5);
```

left

```
i-
cal
{\rm read}\text{-}
ings.
In
all
these
con-
texts,
we
\operatorname{can}
model
dhu
as
uni-
ver-
sally
quan-
ti-
fy-
ing
over
(a
sub-
\operatorname{set}
of)
\mathbf{a}
cir-
cum-
stan-
tial
\operatorname{modal}
dhu
'fut'
base.
en-
cod-
ing
fu-
\mathbf{ture}
tense
with
I-
and
II-
inflections
barpuru
godarr
ŋarra
dhu
nhä-
\eta u//
fu-
neral
to-
mor-
row
1s
fut
see-
II//
'I'll
watch
the
fu-
neral
tomorrow.'dhu-
fut//
mukul
dhu
gi
nhin-
i
raŋi-
ŋur
godarr//
```

aunt

namely circumstantial modal base  ${\tt CIRC} m$ and some $_{\rm of}^{\rm type}$ or- $\operatorname{der-}$ ing source o.The function  $\operatorname{BEST}$ selectsthe "best" worldsina circumstan- $_{\rm tial}$ modalbase, ac- $\operatorname{cord}$ ing to how well they con- ${\rm form}$ with whatever  $\operatorname{set}$ of propositions is re- ${\it turned}$ by o. De- $\inf_{\mathrm{ing}}$ on  $\quad \text{which} \quad$ 

ordering
source
is
provided
by
context,
these
conversa-

```
\begin{array}{c} \mathrm{recorder} \\ \mathbf{mod} \end{array}
break-
II//
'I'm
al-
ways
wor-
ried
that
the
{\rm recorder}
will/could
break.'[DhG 20190417]//
... μυh
narra
bal-
aŋu (bäynha)
dhiŋg-
uŋu
nawalul'yusmoke//
1s
mod
(mod)
die-
smoke.erg//
\operatorname{could}
die
from
smoke.'[DhG 20190405]//
nayi
balan
dhu
\quad \text{the} \quad
djannar-
thicat//
3s
\bmod
fut
hunger-
inch.II//
(the
cat)
might
get
hun-
gry.'[AW 20190429]//
Predications
about
 "past
pos-
si-
bil-
i-
ties"
are
in-
di-
cated
by
the
co-
occurrence
of
\begin{array}{c} bala\eta(u) \\ \text{and} \\ \text{IV} \end{array}
as
seen
in
().
A
coun-
```

ter-

```
 \begin{array}{c} [\mathrm{violet!10!white}] \\ (0, 0.02) \end{array} 
rect-
an-
gle
 (6.8,1.5);
 or-
ange!10!white]
(6.8, 0.02)
rect-
an-
gle
 (12,1.5);
(3.675,0)
node[below=3pt]
node[above=15pt]
\begin{array}{l} \text{IOGe}[\text{above-1c}_{\text{F}}] \\ \text{IV}; \\ (5,0) \\ \text{node}[\text{circle,fill,label=below:} \lfloor today] \\ \text{node}[\text{below=3pt}] \\ \text{node}[\text{above=3pt}] \\ \cdot \end{array}
 (7,0)
node[diamond,shade,inner
\begin{array}{l} \operatorname{color=ochre,outer} \\ \operatorname{color=black,label=below}:t*] \end{array}
node[below=3pt]
node[above=3pt]
 (9.5,0)
node[below=3pt]
node above=15pt]
II;
(9.5,0)
node[circle,fill,label=below:today)]
node[below=3pt]
node[above=3pt]
        The
dis-
tinc-
tion
be-
tween
the
tem-
po-
ral
in-
ter-
pre-
ta-
tions
in
II-
and
IV-
inflected
clauses
then
in
ef-
fect
re-
flects
the
dis-
tinc-
tion
drawn
by
Čon-
do-
ravdi2002
be-
tween
```

```
base.)^{61,62}
Following \\
treat-
ments
of
En-
glish
modals
(e.g., WOLL
and
may,
com-
pare
Con-
do-
ravdi2002, Condoravdi2003),
wd
modals
are
treated
as
quan-
ti-
{\rm fiers}
over
con-
tex-
tu-
ally
sup-
plied
con-
ver-
sa-
tional
back-
{\rm grounds}
that
"uni-
formly
ex-
pand
the
time
of
eval-
u-
a-
_{[i']}^{\mathrm{tion}}
for-
ward"
[12]Con-
do-
ravdi2003.
      Armed
\quad \text{with} \quad
a
se-
man-
tics
for
the
modal
par-
ti-
cles
\quad \text{with} \quad
which
\quad \text{the} \quad
"irrealis-
aligned"
```

II and IV

chotomous realitystatuscategory.<sup>63</sup> In an analytic decisionperhaps emblem- $\operatorname{atic}$ of  $\quad \text{this} \quad$ difficulty, [467]Port-ner2012 appeal to $\mathbf{a}$ necessity to"invokegrammati- $\operatorname{cal}$ ization" in their analy-sis of subjunctiveselecting pred-icatesinRomance suggest-ing that inat

mance—
sugsuggesting
that
in
at
least
some
cases
(sc.
for
some
predicates)
the

basisof this generalisation, Gian2016 (e.g.,Gian 2016; Giannakidou2020i.a.) takes the subjunctive to indicate "nonveridical-ity" with  ${\rm re}\text{-}$ spect toa proposition that is, it  $\quad \text{in-} \quad$ dicatesthat there exists atleast one world ina given set of worlds(amodal base, M) in  $\quad \text{which} \quad$ that proposition is not  ${\it true}$ (G-

 $\begin{array}{c} \mathrm{main.}^{65} \\ \mathrm{On} \\ \mathrm{the} \end{array}$ 

clause.  $^{66}$ An IR-RE-ALIS  $\operatorname{mood}$ The discussionabove draws on the literature on VER- $\operatorname{BAL}$ MOOD, an $\quad \text{en-} \quad$ terprise which at- ${\it tempts}$ tocapture intuitionsabout the meaning con- ${\it trasts}$ be- ${\rm tween}$ the IN-DICA- ${\bf TIVE}$ and SUB-JUNC-TIVE categories of (al- $\dot{m}ost$ exclusively) European languages.<sup>67</sup> In his comparison of IR-RE-

ALIS and

languages, we have reason [following][]Palmer2001 to treat the moodcategory inflectedon WDverbsasIR-RE-ALIS. The na- ${\rm ture}$ of the irrealis mood and itsrelation tomodaloperatorsisfurther devel- ${\rm oped}$ in the re- $\ \, \text{main-}$  $\operatorname{der}$ of  $\quad \text{this} \quad$ chap-ter; the question of syntac- $\operatorname{tic}$ subor-

dination is investigated

```
as-
sertable
at
the
su-
per-
set
(be-
cause
oth-
er-
wise
S
would
have
{\rm done}
so)
fol-
lows
nat-
u-
rally
from
ba-
\operatorname{sic}
{\rm Gricean}
princi-
ci-
ples
([see][]Horn1984
a.o.)<sup>68</sup>
```

A non-veridical semantics for IR-RE-ALIS

```
In § ?? above, follow-ing Gian-nakidou1995 (Gian-nakidou1995, Giannakidou1998
```

Given

that II

and IV

are

only fe-lic-

i-

tous

in

 $\quad \text{the} \quad$ 

pres-

ence of

one of

 $\quad \text{these} \quad$ 

non-

veridi-

 $\operatorname{cal}$ 

op-

er-

a-

tors,

their

 $\operatorname{dis-}$ tri-

bu-

tion is

ap-par-ently

re-stricted

to

ir-

re-alis

claims. On

 $\quad \text{the} \quad$ 

ba-

sis

of

itsdis-

 ${
m tri}$ -

bu-

tional facts

in

ad-

dition  $son)^{71}$ holds
of ina subsetof branchesinthe metaphys-ical modalbase that, in-deed, this predcatedoesnothold at $\operatorname{all}$ branches.That is  $\quad \text{to} \quad$ say that dhuclaims sat-isfy

IRR.

 $i.^{72}$  This is shown in ().

lexical
entry
for
wd
negationden:neg

```
{\rm sue.}^{73}
       Apparent
in-
abil-
ity
read-
ings
of
\boldsymbol{b\ddot{a}y\eta u} \mathrm{inab}
CON-
TEXT.
My
nephew's
bro-
ken
his
leg.
Ι
ask
if
he's
go-
ing
out
tonight:waku//
bäyŋu
ŋarra
dhu
mar-
rtji
dis-
co-
lil
bili
bäyŋu
ŋarra
gi
mar-
\mathrm{rtji}//
neg
1s
fut
go
disco.all
\operatorname{cplv}
neg
1s
ipfv.II
go.II//
won't
go
to
the
\operatorname{disco}
be-
cause
can't walk.'[MG 20180802]//CONTEXT.
{\rm We}
see
an
in-
jured
wal-
laby.weti//
nunha
weti
(#?yaka/)
bäyŋuny
(dhu)
gi
dju-
murr'djumurr'yurr//
dist
```

wal-

```
line
width{=}1.5pt, style{=}dashed]
(3.5,1.25)
(5,1.5)
>,
line
width{=}1.25pt, style{=}dashed]
(5,1.5)
(6,1.75)
node[label=right:b_1]
(7,1.75)
line
width{=}1.25pt, style{=}dashed]
(5,1.5)
\begin{array}{c} (6,1.375) \\ \text{node}[\text{label=right:} b_2] \\ (7,1.375) \end{array}
width{=}1.5pt, style{=}dashed]
(3.5,1.25)
(5,1);
[-
>,
line
width=1.25pt,style=dashed]
(5,1.5)
(6,1.75)
line
width=1.25pt,style=dashed]
(5,1)
\begin{array}{c} (6,1.125) \\ \text{node}[\text{label=right:}b_3] \end{array}
(7,1.125)
line
width=1.25pt,style=dashed]
(5,1)
(6,.75)
node[label=right:b_4]
(7,1.125)
(6.5,0)
node[circle,fill=forest,label=below,align=left:now] node[below=3pt]
node above=3pt
```

In this chapter, we have seen data which shows how negarive operators

appear  $\underline{\text{tion.}}^{75}$ 

In

 ${\rm terms}$ 

of

the

branch-

ing

times

frame-

work,

then,

the

func-

 ${\rm tion}$ 

of

NEG-

A-TIVE

op-er-

a-

tors

 $\operatorname{can}$ in

 $\mathbf{a}$ 

sense

be

as-

sim-

i-

lated with

modals.

As

an

exam-

ple,

in

the case

of

negated

pred-i-

ca-

tionsabout

the

past,

in-

dices

atwhich

the

ba- $\operatorname{sic}$ 

propo-

si-

tion holds

are

 ${\rm not}$ 

ones

that

are

consis-

tent

with, or

≺-

accessible

tospeech

time

(i\*),

```
phenomenon is illustrated by the data in (-).
```

```
Negated sameday future predications fail to li-
```

cense

 $_{\rm The}^{\rm (II).^{78}}$ sameday future, inwhich dhuand I cooccur,  $\operatorname{can}$ ineffectbe understoodas $\mathbf{a}$ grammat- ${\bf calised}$ futu- $\mathbf{rate}$ construc- $\mathbf{tion}.$ Dhurequires an evalua- ${\rm tion}$ in- $\operatorname{dex}$ (cprovides i\*, which, again, is "passed up" into the derivation  $_{\rm I)}^{\rm by}$ and obligatorily advances the instantia- ${\rm tion}$ time of

the eventual-

The analyysis of
the sameday
future,
then,
is based on
the hypothesis that
predications
about
the
sameday
future

even if

```
_{\rm The}^{\rm dex.^{81}}
dis-
tinc-
tive
con-
tri-
bu-
tion
of
the
IR-
RE-
ALIS
in-
flec-
tions,
then,
is
that
they
im-
pose
a
pre-
sup-
po-
si-
{\bf tion}
on
the
(contextually-supplied)
\operatorname{dex}
of
eval-
u-
a-
tion:
namely
that
\quad \text{there} \quad
ex-
ists
some
con-
ceiv-
able,
meta-
phys-
i-
cally con-
sis-
\operatorname{tent}
al-
ter-
na-
tive
"branch"
at
which
their
pre-
ja-
cent
is
{\it false}.
      An
anal-
y-
sis
of
the
```

wd paradigm

the domain of each in- ${\rm flec}\text{-}$  ${\rm tion}$ is superim-posed.<sup>82</sup> Note the gen-eral do- $_{\mathrm{main}}$ of I; due to Max-Pre-SUPP, where do-mains intersect, that which "pre-sup-poses the the most" (fig. ??) is fe-lici-

tous.

 $\begin{bmatrix} \text{Par-} \\ \text{ti-} \\ \text{tion} \\ \text{of} \\ T \text{:} \\ \text{the} \\ \text{WD} \\ \text{in-} \end{bmatrix}$ 

```
[e.g.,][]Lunn1995.<sup>83</sup>
That
is,
pre-
vi-
ous
anal-
y-
ses
have sug-
gested that,
\quad \text{for} \quad
ex-
am-
ple,
SUB-
JUNC-
TIVE
in-
flec-
{\rm tion}
_{P}^{\mathrm{on}}
is
{\rm taken}
to
in-
di-
cate
that
the
{\rm speaker}
is
{\rm not}
as-
sert-
ing/willing
to
com-
mit
them-
selves
to P.
```

ing. 85 Examples are given in (mak).

```
\begin{array}{c} \text{a.o.}^{86} \\ \text{This} \end{array}
per-
spec-
tive
has
been
for-
mu-
lated
as
a
com-
mu-
nica-
tive
con-
ven-
tion,
e.g. (), fol-
low-
ing [105]Lauer2013, [157]Condo-ravdi2011:<sup>87</sup>
```

clause. $^{88}$ 

```
_{\rm Ideas}^{\rm ter.^{89}}
about
the
il-
lo-
cu-
tion-
ary
force
and
norms
of
as-
ser-
{\rm tion}
are
for-
malised
_{\rm mod\text{-}}^{\rm by}
elling
as
com-
pris-
ing
\mathbf{a}
covert
dox-
as-
{\rm tic}
\operatorname{modal}
an-
chored
by
the
ac-
tual
world
(\sim_{\alpha}
Kauf-
{\rm mann}2005
or
an
up-
date
func-
tion
on
speaker's
pub-
lic
com-
\operatorname{mit}-
ments/beliefs
and (ul-
ti-
mately)
the
com-
mon
ground
Krifka2015,Lauer2013.
```

```
 \begin{array}{l} [12] Krifka 2021.^{90} \\ Given \end{array}
its
ap-
par-
ent
vari-
able
modal
force,
maku
takes
an
ac-
ces-
si-
bil-
ity
re-
la-
tion
(e.g.,
AS-
SERT)
as
its
sis-
ter
and
re-
turns
a
\operatorname{sub-}
\operatorname{set}
of
the
modal
base
it
picks
out.
Fol-
low-
ing
Matthew-
son 2010, Rullmann 2008
a.o.,
force-
variable
modal-
ity
is
\operatorname{mod}-
elled
as
uni-
ver-
\operatorname{sal}
quan-
tifi-
ca-
tion
over
a
(contextually-
determined)
\operatorname{sub}-
\operatorname{set}
of
the
modal
base
(as
de-
```

 $\begin{array}{c} \text{ter-} \\ \text{mined} \end{array}$ 

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censed.^{91}
     \operatorname{ccls}
Ma-
\mathbf{trix}
pred-
i-
cates
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en-
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ments
do
\mathbf{not}
li-
cense
\mathbf{the}
ir-
re-
{\bf alisembed}
      ŋurik
ŋarra djäl
guya-
[ ŋunhi [ (ŋayi)
darrkthu-
\overline{\mathbf{rr}}
\ w\ddot{a}mut\text{-}
nha
]]want//
texd.dat
1s
want
fish-
dat
texd
(3s)
bité-
III
malk-
acc//
ʻI
want
that
that
fish
bit
Wä-
mut/I
want(ed)
the
fish
to
have
bit-
ten
Wä-
mut.'[22]Wilkinson//
      ministay
nyä<u>l</u>'yurr
[ŋunhi [
gap-
man'dhu
ga-
\mathbf{n}
gurrupa-
djä-
malie//
min-
```

is-

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Broadly
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dex,
dhu,
'fut,
dis-
places
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pred-
cate
into
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po-
ten-
tial
do-
main,
bäyŋu/yaka
into
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ter-
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tual
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main
and
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of
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re-
alis
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more
broadly, fol-
low-
ing
Von-
Princea).
     {\rm In}
\operatorname{all}
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\quad \text{these} \quad
cases,
the
com-
mon
{\rm ground}
in
```

a given dis-

```
na-
tive
to
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ter-
ance
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\operatorname{dex}

      \bigcap_{i*} = 86 \quad \text{Condo}

ravdi2002.
Consequently, "ob-
jec-
tive"
non-
veridi-
cal-
ity
re-
{\it quires}
an
"an-
chor"
at
which
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ter-
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tives
to
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ac-
tual
\begin{array}{c} present \\ (i*) \end{array}
are
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\operatorname{sid-}
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im-
plied
bу
von
Prince's
tri-
chotomy §??,
also
fig
??.)
is
li-
{\it censed}
if,
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a-
{\rm tive}
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ing,
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ple,
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Wägilak,
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sions
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{\it marised}
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ble ??
above,
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_{\rm de\text{-}}^{\rm ing}
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tions
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East-
\operatorname{ern}
(Mi-
watj)
Dhuwal(a)
va-
ri-
eties
Mor-
phy 1983, Heath 1980
do
\operatorname{not}
ap-
pear
to
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hibit
the
\operatorname{cyclic}
tense
or
\bmod
neu-
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tion
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scribed
above
^{\rm for}_{\rm WD.^{93}}
Ad-
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Melanie Wilkin-

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tween
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\det^{\mathrm{pst}}
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mented
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Heath
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\operatorname{cord}-
\operatorname{ing}
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flec-
tion's
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nacy
with
wd,
i.e.,
_{\rm IV}^{\rm and}
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spec-
tively.
That
is,
in
elic-
i-
ta-
tion,
\mathbf{a}
dis-
tinc-
tion
be-
tween
and
ap-
pears
for
speaker
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but
not
for
AL,
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ing
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a
\begin{array}{c} \text{near-} \\ \text{complete} \end{array}
merger
of
and
in
Ritharrŋu-
Wägilak.
      Interspeaker
vari-
```

```
This differ-
ence might be modelled as a contrast in the scope-taking behaviour of RW - 'may' as against wd bäyŋu/yaka
```

[]Mithun1995

??.<sup>96</sup> What's

more,

(ge-

O-

graph-i-

cally) in-

ter-

 ${\rm me}\text{-}$ 

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ate

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Dhuwala va-

ri-

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par-tic-

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larly the Gali-

win'ku

Djam-bar-

rpuyŋu va-ri-

eties

de-

scribed

in Wilkin-

 ${\rm son} 1991$ 

(and

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haps the

Djapu' (East-

èrn

 ${\bf Dhuwal}$ 

va-

ri-ety) spo-ken

in Yir-

rkala and

de-scribed

in

Mor-

phy1983) ex-hibit

pos-si-

ble

tran-

si-

tion phe-

nom-

ena.

```
bours.<sup>97,98</sup>
*Lexical
re-
or-
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Α
po-
ten-
tial
hy-
poth-
e-
sis
un-
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pin-
ning
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change
is
that,
with
the
ad-
vent
of
\operatorname{cyclic}
tem-
po-
ral
\operatorname{ref}-
er-
ence,
Ι
the
erst-
while
PRESENT
{\it tense}
comes
to
fail
to
re-
li-
ably
en-
code
a
dis-
\operatorname{tinc}-
tion
be-
tween
past
and
present
tem-
po-
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ence.
Con-
se-
quently,
there
is
```

a greater reliance

suppo-si-tion that contextually-supplied reference indexhas one or bothof these tense/moodproperties. This semanticsintan- $\operatorname{dem}$ with a gen- $\stackrel{\circ}{\mathrm{eral}}$ prag-matic principle (MAXPRESUPP, itself an implementation of  ${\rm Gricean}$ reasoning about cooperation in communication.)

tion:<sup>100</sup> features exhibited (to varying degrees) in wd.

## ${\bf Chapter}$

?? comprised a formal treatment of the expression of

temporal cat-