Are there different kinds of appositive relative clauses?

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In his latest book on relative clauses, Cinque claims that there are two fundamentally different kinds of appositive (non-restrictive) relative clauses. The unintegrated ones are the typical English type, the integrated ones are found in various languages, including Chinese and Japanese. This second type shares some characteristics with restrictive relatives, and seems to require a different syntactic analysis. Some languages, like Italian, supposedly have both types. A list of a dozen criteria differentiates the two, such as the use of relative pronouns and the possibility of heavy pied piping. However, when we carefully look at Dutch and other languages, the picture starts to blur considerably, and an abundance of (micro)variation shows up. This is problematic. I argue that the suggested criteria do not add up to two natural classes at all and are in fact non-explanatory. Therefore, we need to focus on what is truly fundamental to non-restrictiveness, which leads to a different perspective on the matter.

Keywords: appositives, integrated vs. unintegrated constructions, non-restrictive interpretation, relative clauses, relative pronouns

1. Introduction and background

Cross-linguistically, there are various types of relative clauses from a surface-syntactic point of view. In his book from 2020, Guglielmo Cinque undertakes the effort to derive all such types from one underlying representation, making use of language-particular and construction-dependent displacements and choices of spell-out. The original structure is double-headed in a sense: it contains a representation of both an external and an internal 'head noun'. This is necessary to account for well-known 'raising' (reconstruction) and 'matching' (non-

reconstruction) effects that we find in many languages.[1] (Reconstruction can be found in examples like *the headway we made; the portraits of himself that Van Gogh painted.*) However, there is at least one type of relative construction that appears to be more fundamentally different, and this concerns semantically non-restrictive (or appositive) relative clauses.[2] Notably, reconstruction effects are impossible in appositive constructions of any kind (see also Bianchi 1999), this is not a point of discussion.

Appositives share properties with parentheticals in that they are *unintegrated* to some extent (cf. De Vries 2006a, 2012a, and further references there). Interestingly, Cinque (2020: Chapter 3.1, based on an earlier paper from 2006) argues that there is a second basic type of non-restrictive relative clause that must be characterized as *integrated*. This type shares various syntactic properties with restrictive relatives, and it can be derived from the universal double-headed structure just mentioned, Cinque claims. Despite a lot of cross-linguistic work on relative clauses in general, integrated (finite) non-restrictives have been largely overlooked in the theoretically oriented literature on appositives, perhaps due to a focus on English-style postnominal non-restrictive relatives, which can be found in many (if not all) Indo-European languages. What is more, it has explicitly been stated (e.g. in De Vries 2005) that an appositive interpretation is compatible exclusively with a postnominal relative construction; see also Del Gobbo (2003, 2008). While we could happily accept that these earlier claims be amended, the situation is not entirely straightforward. In what follows, let us therefore review the ideas concerning two different types of appositives in some detail. It turns out, for

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1. For the reader's convenience, the double-headed base structure proposed by Cinque (2020: 15) can be reproduced as follows. The concrete example here is *the two nice books that John wrote.*

i. $[_{DP} [_D$ the$] [_{FP} [_{FP}$ F $[_{YP}$ CP$_{(relative)}$ Y $[$**dP1 = external Head**$]]]]]]$

ii.   *where the relative* CP = $[_{CP} [_{CP} [$C (that)$] [_{IP} [_{DP}$ John$] [_{IP}$ I $[_{VP} [_V$ wrote$] [$**dP2 = internal Head**$]]]]]]$

iii.   *where the Head* dP1 = dP2 = $[_{dP} [_{NumP}$ two$] [[_{AP}$ nice$] [_{NP}$ books$]]]$

The relative clause is generated as a relatively high modifier in the extended projection line of the external head noun. Depending on the exact construction type, there are some additional movements and deletions. CP-internally, the internal head dP2 moves to SpecCP, which accounts for locality effects. In a matching construction, the external head dP1 moves to SpecFP (across the relative clause in its entirety) and the internal head is deleted. Compare also the discussion of (3b) in the main text below. In a raising construction, by contrast, it is the internal head that is spelled out (after movement), and the external head is deleted (in situ). Just to be clear, this paper is not intended to review these ideas.

2. In this paper I will not be concerned with unrelated 'maximalizing' interpretations (see Grosu 2002 for an overview), which share properties with restrictives of the 'raising' variant.

instance, that data from Dutch complicate the picture considerably – even Dutch, I might add, considering that Dutch is closely related to English. All in all, I will suggest a perspective on the matter that differs from the one Cinque offered.

If there were indeed a dichotomy between two fundamentally different types of (finite) non-restrictive relative clauses, there would be four logically possible languages in this respect; see the scheme in (1), based on Cinque (2020: 163–167), where I also indicate the linking element used (a relative pronoun or a complementizer):

(1)

	English	Mandarin	Italian	Gungbe
unintegrated	yes (*wh*)	–	yes (*il quale*)	–
integrated	–	yes (*de*)	yes (*che/cui*)	–

Some languages do not appear to have appositives at all (Gungbe, Dagbani), some have only the integrated type (mostly, these are languages with prenominal relative clauses, like Chinese, Basque or Japanese), some have only the unintegrated type (English, Romanian, Polish), and, crucially, some languages are said to have both (Italian, Catalan), depending on the choice of the linking element. It must be stressed that a systematic cross-linguistic investigation is yet to be performed, so this is only the preliminary picture. Continental Germanic is discussed in Sections 2 and 3 below. For now, I will focus on postnominal relative constructions, and only come back to prenominal constructions briefly at the end of the paper.

How are the two types to be distinguished? After all, the interpretation (non-restrictive) is assumed to be similar. According to Cinque, there is a list of syntactic criteria that can be used as diagnostics. These can be summarized as in (2), to be exemplified in Section 2:

(2)

property	integrated	unintegrated
illocutionary independence	–	+
RC split across discourse	–	+
split antecedent	–	+
retention of internal head	–	+
non-identical internal head	–	+
non-nominal antecedent	–	+
coordinated *wh*	–	+
heavy pied piping	–	+
parasitic gap	+	–
reflexive antecedent	+	–

Basically, the integrated type syntactically patterns with restrictive relatives.

Cinque (2020: 158, 160) proposes, in a nutshell, the following analysis for unintegrated (3a) and integrated (3b) non-restrictives, respectively.

(3) a. ... [$_{HP}$ DP$_{head}$ [H CP$_{rel}$] ...
     b. ... [$_{FP}$ DP$_{ext}$ [F [[$_{CP-rel}$ ~~DP$_{int}$~~... C ... t$_{int}$ ...]] ... t$_{ext}$]] ...

In (3a), the HP projection represents a discourse connection: essentially, there are no grammatical relationships across H. This means that the relative CP has a parenthetical status with respect to the antecedent DP, which is by and large compatible with more detailed analyses along such lines (see also Section 3), I think. In (3b), for postnominal integrated appositives like Italian *che/cui* constructions, the structure is a bit more complicated; it can be compared to restrictive matching relatives (Cinque 2020: 36); see also footnote 1. The relative CP is a modifier of the external head DP, which moves to the left of it in some nondescript functional projection FP. The internal representation of the head is A-bar moved but eventually deleted (this is similar to the traditional relative operator). The difference with a restrictive relative is that DP$_{ext}$ includes the reference-determining external determiner in (3b), whereas D$_{ext}$ (my notation) would select and take scope over the entire FP in a restrictive construction, where the relative 'head' is a slightly lower functional projection of N (a dP in Cinque's notation). See also Section 3. To make this a bit more concrete, consider the examples in (4). Any analysis of relative clauses needs to derive the difference in constituency between restrictives and appositives as indicated. Here, the scope of *the* is underlined.

(4) a. Mary talked to [**the** [[[<u>old man</u>] [<u>(that) she recognized from before</u>]]]].
                                                                          (restrictive)
     b. Mary talked to [[**the** [<u>old man</u>]] [, who she recognized from before]].
                                                                          (appositive)

Both (3a) and (3b) meet this requirement and fit the pattern in (4b) – but in a very different way.

We can now ask the following questions. Is the distinction between integrated and unintegrated appositives justified? Is the list of syntactic diagnostics in (2) adequate and complete, and do they form a natural class? Do these properties follow from the proposed structure in (3)? In the next sections, let us test the syntactic criteria on the basis of Dutch data, and evaluate the situation.

2.   Non-restrictive relative clauses in Dutch

In Dutch, there are a number of different relative pronouns; there are no complementizers in relative constructions (see also Smits 1988 for a comparative

overview). All these pronouns are used in restrictive as well as appositive relative constructions. Relative clauses are always postnominal and subordinate (no V2); the only immediately observable difference between restrictives and appositives is the 'comma intonation' in the latter.[3] The most common relative pronouns are *die* (common gender) and *dat* (neuter); these are homophonous with demonstratives, and are often called *d*-pronouns. There are also *wh*-relative pronouns, homophonous with interrogative pronouns: *wie* 'who' (animate), *wat* 'what' (non-animate or indefinite), *wiens* 'whose' (genitive/possessive), *wier* (GEN.FEM/PL, somewhat archaic). These are often used in pied piping constructions, although *wie* and especially *wat* frequently occur as a colloquial alternative for *die* and *dat*. Furthermore, *waar* 'where' is used in prepositional inversion contexts with a non-locative meaning (compare English *whereof*, etc.). In adverbial relatives, *waar* 'where' (locative) and *hoe* 'how' (manner) can be found. Finally, there is a form *welke* 'which' (or *welk* for SG.NTR.INDEF) that can be used in many contexts as an alternative to *die/dat/wie/wat*, but it has quite a formal ring to it. Archaic variants are *dewelk(e)* (lit. 'the.which') and *hetwelk(e)* (NTR). A non-archaic but formal alternative for *hetwelk* is *hetgeen*, used especially in contexts with a clausal antecedent.

Below, I will provide some relevant illustrations that relate to the diagnostics in (2), taking Cinque's Italian and English data for granted. Bear in mind that there could be a distinction in behavior between the *d*-paradigm and the *wh*-paradigm.[4]

Illocutionary independence

Attributive appositives count as independent speech acts (see also Heringa 2011; Griffiths 2015, and references there). It has been noted that appositive relative clauses (ARCs) can express interrogative force in a declarative context, albeit somewhat marginally. This is also the case in Dutch:

(5) *Peter, die   nog steeds ziek is?, zou   morgen   komen.*
     Peter *d*-REL still   ill   is would tomorrow come
     'Peter, who is still ill?, would come tomorrow.'

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3. I cannot go into this here, but see Dehé (2014); Truckenbrodt (2015), and Güneş (2015) for relevant discussion and references.

4. Due to the page limit, only a restricted amount of examples can be presented and discussed, but I think the general patterns are clear. Unless explicitly mentioned otherwise, I assume that *welk(e)* may replace *die/dat* in the examples below, but is usually not the preferred option.

The reverse situation is possible, too; see (6). Although worth some discussion, this is not distinct from the situation in restrictives, however, so let us ignore it for now.

(6) *Kan Peter, die   ziek is, morgen   wel komen?*
can Peter *d*-REL ill   is tomorrow AFF come
'Is Peter, who is ill, able to come tomorrow?'

Strikingly, simple attributive appositions can also be interrogative:

(7) *Peter, een loodgieter?, komt   morgen.*
Peter a   plummer   comes tomorrow
'Peter, a plummer?, is coming tomorrow.'

The secondary (non-at-issue) extended proposition here means "Is he (= Peter) a plummer?". Thus, while it makes sense to assume that such appositions are structurally clausal, the presence of an overt relative pronoun is by no means required to obtain speech act semantics.

RC split across discourse (and possibly speakers)

Unintegrated ARCs can be split across discourse such that the antecedent is in the right periphery of one sentence, and the RC independently constitutes the next sentence. This is also the case in Dutch; see (8) through (10). Note that the full stop intonation pattern can be distinguished from a comma intonation.

(8) *Ik heb   het pakje   aan Jan gegeven. Die   trouwens ziek is.*
I have the package to   Jan given   *d*-REL by.the.way ill   is
'I gave the package to Jan. Who is ill, by the way.'

(9) *Jan kan niet komen. Wat/Hetgeen/Hetwelk   suggereert dat hij ziek is.*
Jan can not come   what/the.thing/the.which suggests   that he ill   is
'Jan can't come. Which suggests that he is ill.'

(10) *Ik sta   hier naast   het oude kasteel. Dat   eruit ziet   of het bijna   instort.*
I stand here next.to the old   castle *d*-REL PRT   looks if it   almost collapses
'I am standing next to the old castle. Which looks as if it is about to collapse.'

It is also possible to distribute the two sentences over different speakers (where the second speaker provides a comment about an element of the first speaker's message). Remarkably, the second sentence remains formally a subordinate clause, which is somewhat paradoxical.

Split antecedent

ARCs can take a split antecedent in Dutch; see (11) and (12).

(11)   *Jan houdt van **appeltaart** en   Mieke van **kersenvlaai, die**   ze   het*
       Jan likes of   apple.pie   and Mieke of cherry.flan   *d*-REL they the
       liefst   met slagroom   eten.
       preferably with whipped.cream eat
       'Jan likes apple pie and Mieke, cherry flan, which they preferably eat with
       whipped cream.'

(12)   *Heb je   **Jan** zien lopen en **Mieke** fietsen, **die**   zo veel   van elkaar*
       have you Jan seen walk and Mieke cycle   *d*-REL so much of   each.other
       houden?
       love
       'Did you see Jan walking and Mieke cycling, who love each other so much?

This phenomenon can be compared to the fact that a plural personal or demon-
strative pronoun can refer back to the sum of two separate referents mentioned
earlier in the discourse. In relative constructions, it is a bit contrived, and depen-
dent on the possibility of RC-extraposition.

Retention of internal head and non-identical internal head

Depending on a felicitous discourse, both the external and internal noun can
be realized in an ARC (see also Cardoso & De Vries 2010 for discussion). The
RC-internal NP can be either a repetition or a reformulation of the external
one. In (14), for instance, 'masterpiece by Mulisch' highlights a property of the
antecedent, a book title. In (13), N 'waiter' is simply repeated.

(13)   *Ze bestelde een groentetaart bij de dienstdoende ober,   welke/*die/*wie*
       she ordered a   vegetable.pie at the on.duty   waiter which/*d-REL/*who
       ober   vervolgens de menukaart weer meenam.
       waiter next   the menu   again took
       'She ordered a vegetable pie at the waiter on duty, which waiter then took the
       menu again.'

(14)   *Ze las*   De ontdekking van de hemel, *welk/*dat/*wat   meesterwerk*
       she read *The discovery   of   the heaven*, which/*d-REL/*what masterpiece
       van Mulisch in 1992 uitgekomen is.
       of   Mulisch in 1992 published   is
       'She read *The discovery of heaven*, which masterpiece by Mulisch was pub-
       lished in 1992.'

In this type of construction, only the relative pronoun *welk(e)* can be used.[5]

Non-Nominal antecedent

Contrary to restrictive RCs, appositives can take an antecedent that has a category other than noun phrases, most commonly a clause (finite or non-finite). Some examples are given in (15) through (17), where the antecedent is printed in bold-face; here, it is clausal (finite and a small clause), adjectival, and prepositional, respectively.

(15) a. **Meneer Jansen kreeg   de prijs,** wat Mieke stom vond.
          mister   Jansen received the prize what Mieke stupid found
          'Mr. Jansen received the prize, which Mieke considered stupid.'
    b. *Mieke vond* **de lezing saai,**   *wat ik ook vond.*
          Mieke found the lecture boring what I   also found
          'Mieke found the lecture boring, which I also found.'

(16) *Deze acteur bleek* **verrassend muzikaal,** *wat/*dat   zijn tegenspeler*
     this   actor proved surprisingly musical   what/**d-*REL his antagonist
     helaas   niet was.
     unfortunately not was
     'This actor proved to be surprisingly musical, which his antagonist wasn't, unfortunately.'

(17) *De commissie vergaderde* **van één tot zes uur,** *wat   erg lang is.*
     the committee met   from one till six hour which very long is
     'The committee had a meeting from one till six o'clock, which is a long time.'

Coordinated *wh*

According to Cinque, it is (marginally) possible in unintegrated ARCs to coordi-nate a relative pronoun with another noun phrase. I don't think this is possible in Dutch, even if the meaning is entirely felicitous; see (18) and (19). The b-examples show that the order of the conjuncts is irrelevant: all variants are unacceptable.[6]

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5. This situation is paralleled in interrogative contexts: *Welke/*wie man…?* 'Which/*who man…?' Note that although a simple demonstrative can take a nominal complement (*die man* 'that man'), a relative *d*-pronoun is excluded if it were to be followed by an overt N; this follows from the raising analysis as detailed in the cited paper.

6. However, for reasons that are unclear to me, there is a slight alleviation effect in examples with the pattern ?? … ANTECEDENT, *tussen X en wie er altijd ruzie was / het niet wilde boteren* 'antecedent, between X and who there was always a fight / did not get along'. As far as I can

(18) a. *Ken je Joop, die/wie   en mijn broer samen op reis   zouden
          know you Joop, *d*-REL/who and my   brother together on journey would
          gaan?
          go
          '[*] Do you know Joop, who and my brother would go on a journey
          together?'
     b. *Ken je Joop, mijn broer en die/wie samen op reis zouden gaan?

(19) a. *Jan, met wie en   Piet ik in een team zit, was ziek.*
          Jan with who and Piet I in a   team sit was ill
          '[*] Jan, with Piet and who I am in a team, was ill.'
     b. *Jan, met Piet en wie ik in een team zit, was ziek.

Heavy pied piping

The next diagnostic is pied piping. As is well-documented, simple pied piping is possible in both restrictives and appositives. This concerns configurations like 'N whose N…' or 'N P whom', etc. In addition, unintegrated ARCs are thought to allow for 'heavy' pied piping. However, constructions of the type discussed for Italian and English by Cinque are not acceptable in Dutch:

(20) *Dubai, de   hoogte van de gebouwen waarvan/van welk(e) verbijsterend is, is*
      Dubai the height of the buildings whichof/of   which astonishing is is
      een stad in de Verenigde Arabische Emiraten.
      a   city in the United   Arab   Emirates
      'Dubai, the height of the buildings of which is astonishing, is a city in the
      UAE.'

(21) *Mieke, jaloers op wie/die   haar collega's   waren, heeft de LOT-prijs*
      Mieke envious on who/*d*-REL her   colleagues were   has   the LOT-prize
      gewonnen.
      won
      'Mieke, jealous of whom her colleagues were, won the LOT prize.'

This suffices for now, but the situation concerning pied piping is actually much more complicated; I will briefly come back to it in the next section.

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judge, this is not in the least productive, and it concerns a fixed collocation with the preposition *tussen* 'between'.

Parasitic gap

According to Cinque, parasitic gaps are allowed in integrated ARCs in Italian, but not in unintegrated ones. In Dutch, parasitic gaps exist (here indicated by [e]), but they are not acceptable in a relative context at all:[7]

(22) *Mieke heeft het boek zonder [e] te lezen in de kast gezet.*
      Mieke has   the book without   to read in the closet put
      'Mieke put the book on the shelf without reading (it).'

(23) **Mieke is een vrouw die   iedereen   die   [e] kent, bewondert.*   (RRC)
      Mieke is a   woman *d*-REL everybody *d*-REL   knows admires
      'Mieke is a woman who everybody who knows (her), admires.'

(24) **Mieke is een vrouw die   Joop, die/welke   [e] kent, bewondert.*   (ARC)
      Mieke is a   woman *d*-REL Joop, *d*-REL/*wh*-REL   knows admires
      'Mieke is a woman who Joop, who knows (her), admires.'

We might conclude, of course, that not every diagnostic is available in every language, but an independent reason for the attested contrasts (or lack thereof) is still required.

Reflexive antecedent

Finally, the head of an integrated ARC, it is claimed, can be a reflexive bound by an external subject. This is not possible in Dutch:

(25) **Op deze manier ruïneert Anne zichzelf(,) die/welke   het al   zo moeilijk*
      on this way   ruins   Anne SE.self   *d*-REL/*wh*-REL it already so difficult
      heeft.
      has
      '[*] In this way, he ruins himself, who is already having such a hard time.'

Notice that (25) involves a 'matching' configuration that forces interpretation of the head in the external position, at least for binding purposes, but leaves the internal semantics of the RC to be explained.[8] In fact, one might predict an externally bound

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7. Note that finiteness is not the problem here, as the PG could also be construed in a non-finite context inside the RC, with equally bad results: **…een vrouw die iedereen/Joop die/welke zonder zelf [e] te spreken denkt te kennen, bewondert* 'a woman who everybody/Joop who thinks to know [e] without talking to themselves, admires'.

8. In 'picture noun' constructions (N P REFL), more is possible. See De Vries (2002: 80–82) for some remarks and references. A relevant factor in such contexts is vehicle change to explain possible interpretations inside the RC. See also Salzmann (2017) for relevant discussion.

reflexive antecedent to be fine in *un*integrated ARCs, considering that examples like (26) are fine:

(26)   In this way, John will ruin himself. And he is already having such a hard time...

But the illustrations in Cinque (2020: 151) show the exact opposite of this expectation.

3.   Discussion and conclusion

If we take stock, putting aside intricacies about the data aside for the moment, we can summarize the results in Table 1.

Table 1. Appositive relative clauses

Property	Integrated	Unintegrated	Dutch *d*	Dutch *wh*
illocutionary independence	−	+	+	+
RC split across discourse	−	+	+	+
split antecedent	−	+	+	+
retention of internal head	−	+	−	+
non-identical internal head	−	+	−	+
non-nominal antecedent	−	+	−	+
coordinated *wh*	−	+	−	−
heavy pied piping	−	+	−	−
parasitic gap	+	−	−	−
reflexive antecedent	+	−	−	−

At face value, the picture that emerges here is extremely problematic. Even if we separate the Dutch *d*- and *wh*-paradigm, neither fits the pattern of either integrated or unintegrated ARCs as described by Cinque. Does this mean that there are not two but *four* basic types of ARCs? Such a solution would be non-explanatory. Not only is it unclear what that would amount to theoretically, but it is also an unbounded source of trouble: for every additional language investigated in detail, a new empirical pattern may arise. Rather than pursuing this line of thinking, we need to figure out what is truly fundamental to non-restrictiveness on the one hand, and to relative clausehood on the other hand. In addition, one could study an unknown number of language-dependent interfering factors and construction-specific idiosyncrasies that lead to a myriad of interesting cross-

linguistic (micro)variation within the domain of relative clauses and elsewhere, but that is not really essential to the particular topic.

Let us have a closer look at Cinque's diagnostics. They seem a bit random in various ways. Firstly, is the list complete? There could be other properties to look at, for instance, the possibility of stacking, extraposition, opacity effects, reconstruction effects, the possibility of high adverbs, intonation, and so on. If there are no differences in behavior in these respects between potentially different ARC types in any language, then we would be justified to ignore them, but that is an empirical matter that remains to be shown.

Secondly, it has not been demonstrated that the differences in behavior between integrated and unintegrated ARCs in, say, Italian actually follow from the proposed structures. For some properties this does seem at least intuitively plausible, like the illocutionary independence illustrated above, but for others that is far from clear. Take split antecedents, for instance. It has been shown in the literature that even restrictive relatives can take a split antecedent in various languages, e.g. in (28).[9] In (29), featuring a result clause, it is shown that the pattern is actually more general.

(28)   A boy entered the room and a girl went out who were the same age.

(29)   Mary is so tall and John is so small that they have problems kissing each other.

While it is difficult to derive such constructions,[10] it is evident that this cannot just involve discourse grammar. Similarly, it would be incorrect to assume that 'heavy' pied piping is to be derived from discourse properties of unintegrated ARCs. Apart from the problem that it is unclear how to do this (at least to me), it is empirically incorrect, given that there are contrasting examples of heavy pied piping that are fine even for restrictive relatives.[11] Compare (30) through (32) with (20) for instance.

(30)   a.   *Ik ken   de man met (de vader van) wiens vrouw je   hebt gesproken.*
            I   know the man with the father of   whose wife   you have spoken
            'I know the man with (the father of) whose wife you've spoken.'

                                                                        [restrictive]
       b.   Ik ken Jan, met (de vader van) wiens vrouw je hebt gesproken. [appositive]

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9.   Cinque (2019) has a different take on this, but does not deny the relevant interpretation.

10.   See e.g. De Vries (2002) and McKinney-Bock (2013) for discussion and references.

11.   What is relevant is that the pied piped constituent starts with a preposition. Judgments about individual examples may vary a bit, but the general pattern is not contested as far as I know. See De Vries (2006b) for elaborate discussion.

(31)   *Dubai is een stad over   (de hoogte van) de gebouwen waarvan men zich kan*
       Dubai is a   city about the height of   the buildings whereof one REFL can
       verwonderen.
       marvel
       'Dubai is a city at (the height of) the buildings of which one can marvel.'

       [restrictive]

(32)   *Dubai, over   (de hoogte van) de gebouwen {waarvan, van welke stad} men*
       Dubai about the height of   the buildings whereof / of   which city   one
       zich   kan verwonderen, is gelegen in de   Verenigde Arabische Emiraten.
       REFL can marvel   is situated in the United   Arab   Emirates
       'Dubai, at (the height of) the buildings of which (city) one can marvel, is situ-
       ated in the UAE.'   [appositive]

As a final example, consider the fact, highlighted by Cinque in his book, that there
are languages with restrictive double-headed relative clauses, including Abun (a
Papuan language) and Mina (Chadic). It is certainly a merit of Cinque's double-
headed structure that it is possible to derive such constructions to begin with.
However, at the same time, this makes it difficult to claim that retention of the
internal head as illustrated above necessarily follows from the discourse configu-
ration of unintegrated ARCs that are to be distinguished from integrated ARCs.

All in all, the proposed dichotomy is on shaky grounds, and the proposed
diagnostics do not form a natural class. To me, it seems more fruitful to separate
the fundamental properties of relative clauses from the possibility for a con-
stituent to be appositive (and hence non-restrictive), which in turn is a special
case of parenthesis – with the pragmatic effect of communicating an aside. I do
not wish to reiterate my own ideas here (see De Vries 2012a/b for some updates
on earlier work), but what is relevant is that there is no middle ground. It is not
possible to be a just little bit appositive. If this is correct, *all* Italian ARCs must
be unintegrated: they are interpreted as non-restrictive asides, with comma into-
nation, and so on. (By contrast, it is a mystery to me how these fundamental
properties could be derived from a fully integrated construction, and Cinque's
explanation seems rather incomplete in this respect.) The fact that ARCs starting
with the complementizer *che* behave somewhat differently from the ones involv-
ing the complex relative *wh*-pronoun *il quale*, must be attributed to (micro)vari-
ation resulting from a possibly wide range of interfering factors (starting with the
lexical properties and structure of the linking elements themselves).

This brings me to another issue: there are also differences between Italian
ARCs with *che* and those with the invariant relative pronoun *cui*: they are used
for different grammatical functions. But is it justified to take them together as
one class? The situation in Dutch exacerbates the problem. As was briefly dis-

cussed in Section 2, relative *d*-pronouns and *wh*-pronouns are not always in complementary distribution, also not within each class. Cinque (2020: 165) tentatively suggests that Dutch and German are like Italian in that they have two types of ARCs: integrated ones starting with a *d*-pronoun and unintegrated ones starting with a *wh*-pronoun. I have shown in Section 2 that this seems highly unlikely. Also, I must object to the idea that continental Germanic relative *d*-pronouns are just "agreeing complementizers" (see also Boef 2012), specific exceptions aside perhaps. Generally, *d*-pronouns show all three hallmarks of pronounhood: not just phi-feature variation, but also case endings and the presence in pied piping constructions (consider German *der Mann mit dem...* 'the man with d REL.MASC.DAT'). In present-day Dutch, the last two properties are less obviously visible, but historically they are, and examples like (8) and (10) are quite telling (ARCs split across discourse with *die* or *dat*); moreover, they have a clear pronominal/adnominal parallel as demonstratives, which fits the idea worked out in various raising analyses that a relative *d* is a determiner that becomes an operator.

In his book on p. 31 and elsewhere, Cinque expresses the idea that only relative clauses introduced by a complementizer (or just a silent operator) can be of the raising type, with reconstruction effects; restrictives (and appositives) with a relative pronoun can only be matching (non-reconstructing). This is a generalization of a tendency reported by some English speakers. If so, it would follow that relative *d*-pronouns are not bona fide pronouns, given that Germanic *d*-relatives *do* facilitate reconstruction (this is not contested). But I would rather suggest that the generalization is simply wrong. Since there is no strong theoretical explanation for the idea either, this would solve many problems.[12] This perspective also allows us to view Italian *cui* (which is used in restrictive raising constructions) as a regular pronoun for oblique contexts. Moreover, notice that there are easily retrievable reconstruction effects in Dutch *wh*-relatives, too. Some simple (out-of-context) examples are given in (33):[13]

(33) a. ... *de voortgang die/welke   we hebben geboekt...*
          the progress   d-REL/*wh*-REL we have   booked
          '... the headway we made...'

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12. Consequently, restrictions on the use of English *which* must be viewed as language-specific properties of a particular lexical item.

13. See De Vries (2002: 78–83) for a general discussion of the limitations of such reconstruction phenomena. For instance, idioms can only be split across a relative clause boundary if they are semantically transparent collocations.

b. *... de portretten van zichzelf~i~ die/welke   Van Gogh~i~ had geschilderd...*
    the portraits   of   himself d-REL/wh-REL Van Gogh had painted
    '... the portraits of himself~i~ that Van Gogh~i~ had painted...'

c. *... de periode van haar~i~ leven waar [elke oma]~i~ graag over praat...*
    the period of   her   life   where every granny gladly about talks
    '... the period of her~i~ life that [every granny]~i~ likes to talk about...'

d. *... de vier zijden waaruit   elke   rechthoek bestaat...*
    the four sides   where.from every rectangle consists
    '... the four sides that every rectangle consist of...'

In (33a/b) and similar cases, the (more common) *d*-relative *die* can be replaced by the (more formal) *wh*-pronoun *welke* 'which' without any difference in judgment. Examples (33c/d) involve a *wh*-pronoun in an oblique context. In (33c), a variable that is part of the head NP is bound by a quantifier inside the relative clause. In (33d) the numeral *four* takes scope below the RC-internal quantifier *every*. All in all, it is evident that relative pronouns of both the *d*- and *wh*-type can be used in raising constructions.

So far, I have limited the empirical discussion to a few languages, and I failed to address Cinque's suggestions about prenominal integrated ARCs of the Japanese or Chinese type, which apparently behave similarly to Italian *che/cui*-appositives. While I cannot do full justice to this issue, I am tempted to revert to Del Gobbo's (2003) original standpoint that these constructions are not really ARCs (and therefore not like Italian). They are only 'non-restrictive' in the sense that they do not restrict the referent of the head noun in the regular way. In other respects, they are not convincingly appositive: they do not constitute a pragmatic aside, and it seems they are not completely opaque for binding effects. But that is no different in noun phrases involving non-intersecting adjectives, as in *the alleged perpetrator, the industrious Greeks*. So if this is correct, we are really talking about elaborate prenominal non-intersective modifiers. Notably, these also exist in Germanic in nonfinite form:

(34) *Jan haat de altijd over stikstof zeurende BBB.*
      Jan hates the always about nitrogen nagging   BBB
      'Jan hates the BBB [a political party] that is always nagging about nitrogen.'

According to Del Gobbo, prenominal relative constructions, even if they are non-intersecting, lack the E-type pronoun that is essential for a true appositive meaning and that cannot be cataphoric. It is consistent with this idea that cross-linguistically, there seem to be no languages with a prenominal relative containing a relative pronoun. In postnominal appositives, however, relative pronouns, which can function as an overt expression of the anaphoric E-type link, are quite common. What complicates the matter is that in some languages with

postnominal ARCs a relative pronoun is not overtly required, e.g. in Swedish *som*-appositives or Italian *che*-appositives, which overtly show only a complementizer (see also Smits 1988). For those cases it seems necessary to assume a covert anaphoric E-type connection by means of a relative operator (a silent pronoun), an idea that can be traced back to at least Chomsky (1977).

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