Reflections on the "ad hoc categories"

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Abstract

This article is a reflection on the concept of *ad hoc categories* (AHCs) as developed in a copious number of recent publications. The article refers to well-known concepts such as *prototype*, and theoretical frameworks such as *cognitivism*, and *construction grammar*, which are shortly presented in section 1 inasmuch they may concern the discussion of AHCs and are preliminary to such a discussion. Section 1 deals with the definition(s) of category, section 2 presents the notion of AHC, section 3 deals with different types of AHC, and section 4 discusses some problems connected to this notion and its possible limits. Section 5 is the conclusion that can be drawn from the previous reflections.¹

Keywords: category; categorization; prototype; general extenders; collective nouns; languaging activity.

1. The notion of category

According to the on-line Vocabolario Treccani of the Italian Encyclopaedia a category is a "partizione nella quale si comprendono individui o cose di una medesima natura o di un medesimo genere" ('A division that contains individuals or things having the

¹ Since this paper deals with general problems concerning AHCs, it is not based on a particular corpus. The examples in the text are quoted from the discussed literature. I have kept in the glosses of the examples the original glossing of the Authors. Consequently, there may be some inconsistency in the glossing system. I wish to thank two anonymous reviewers for their insightful, helpful observations.

same nature or same genre'). This is the traditional, rigid definition, according to which an X belongs or does not belong to a given category. A look at the standard monolingual dictionaries of our (Western) tradition confirms Treccani's definition. The French dictionary Larousse has the following definition of *catégorie*: "Ensemble de personnes ou de choses de même nature" ('Ensemble of people or things which have the same nature') and provides a list of synonyms: espèce - famille - genre - groupe - sorte. Thereafter, in addition to different sorts of categories such as Boucherie, Philosophie, Sports, Logique, Mathématiques, a paragraph is also dedicated to Linguistics: "Unité de classement grammatical qui peut correspondre soit à la notion de classe (catégories du nom, de l'adjectif, du déterminant, du verbe, etc.), soit à la notion de constituant (catégorie du syntagme nominal, du syntagme verbal, etc.), soit aux modifications que peuvent subir les classes (catégories du nombre, du genre, du temps, de la voix, du mode, etc.)". In the Digitales Wörterbuch der deutschen Sprache (DWDS) we find the same reference to people or things: "Gruppe, in die jemand oder etwas eingeordnet wird" ('Group, where someone or something is inserted').² The online Oxford English Dictionary (OED) (with reference to Linguistics) states the following: "A class, or division, in any general scheme of classification". Similarly, the Diccionario de la lengua Española (DLE, Real Academia Española) gives a general definition: "Cada una de las clases o divisiones establecidas al clasificar algo" ('Every class or division established when classifying something'), further referring to grammatical categories (e.g. gender and number) and clases de palabras (e.g., noun and adjective). While Treccani and Larousse do not use the verb "classify" in their definitions, the OED and the DLE seem a bit tautological: a class is the result of a classification. This is obviously correct, but the question remains: what is a classification? In other words: a category is the product of categorization, but we have to define how we accomplish the categorizing operation.

It should be noted that the above-mentioned dictionaries (as well as other standard dictionaries) dedicate a paragraph to linguistic categories, considering them mostly from the morphological or morphosyntactic viewpoint. The already cited Vocabolario

² One out of the many instances of the word Kategorie reported in the *DWDS* is for our discussion particularly relevant: Schneider 1965: s.9: "Möbel, Häuser, Kleider, Küchengeräte usw. gehören in die **Kategorie** der dauerhaften Güter, während Streichhölzer, Zigaretten, Tinte usw. zur **Gruppe** der Verbrauchsgüter zählen" ('Furniture, houses, dresses, tools for the kitchen, etc. belong to the **category** of lasting objects, whereas matches, cigarettes, ink, etc. belong to the consumer goods **group**'). I'll come back to such a distinction in section 5.

Treccani (s.v. *categoria linguistica*) mentions the categories SN = sintagma nominale, SV = sintagma verbale (in English NP and VP, respectively), N = nome, V = verbo, and Art = articolo as symbols used to represent a specific category. To the classicalcategories (or parts of speech: PoS) N, V, and Art, SV and SN are added, which pertainto syntax. The same holds for Larousse's distinction between*classe*and*constituent*.

1.1. Categories and categorizations

Linguists have always been well aware that their categories are not completely black or white and that there exist elements that are difficult to classify. Consider, for instance, the participle, whose name says that it *partem capit*, *participates* in the verbal and adjectival nature. Moreover, different PoS may share the property A but not the property B: for instance, the categories of participle and gerund share in Romance languages the feature [deverbal] but differ as to the feature [adjectival] vs. [adverbial].

With reference to mathematics the Vocabolario Treccani states: "Affinché un insieme possa ritenersi definito è necessario che ne siano assegnati gli elementi, oppure che per essi sia assegnata una proprietà caratteristica, cioè un criterio per decidere se un certo oggetto è o no elemento di un certo insieme". ('In order to consider an ensemble as defined, it is necessary that its elements be assigned or a characteristic property be determined for them, i.e., a criterion capable of deciding whether a given object is or is not an element of the ensemble'). The "characteristic property" ('proprietà caratteristica') is the deciding point, but it is implicitly admitted that an element belonging to the category A because it has the *proprietà caratteristica* of A may also have other properties. This is particularly true for linguistics (see above the example of participle and gerund).

However, in the last decades of the twentieth century, the introduction of the concept of *prototype* has further weakened the boundaries of the traditional categories, not only in linguistics but everywhere the concept of category can be applied. As stated by Mauri et al. (2021: 30), "categorization appears to be often instrumental to intersubjective aims, such as mutual agreement and the general management of the speakers' reciprocal positioning"; "speaker and hearer are mutually and contemporarily involved in the identification of the category members and the category boundaries, recurring to exemplification along a progressive zooming-in movement".

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At the same time, both Cognitive Linguistics that analyses linguistic expressions according to the cognitive processes which generate them, and Construction Grammar, where the starting point of every linguistic analysis must be that all linguistic expressions are a combination of different constructs which together specify the form and the meaning, have largely widened the horizons beyond the traditional categories of the parts of speech (*partes orationis*) such as Noun or Verb.³ Texts and sentences constitute the main aspects of analysis. Such a widening is strictly connected with the notion of which, in turn, represents a crucial enlargement of the category concept.

Prototype theory admits that along with eagles, sparrows and swallows also penguins, ostriches, and the now extinct dodos also belong to the category BIRD, although they are (were) unable to fly, where FLYING may represent the most important characteristic of birds. BIRD is a taxonomic, "natural category",⁴ endowed with core representative and less representative elements. Moreover, it is possible to have "not-natural categories" which assemble material things or abstract concepts according to the co(n)textual situation. For instance, in a hunt scenario the hunters can speak of foxes, pheasants and wild boars as an ad hoc category (let us name it PREY ANIMALS), strictly bound to the particular situation of hunting in a particular location inhabited by foxes, pheasants and wild boars (thus, not in Arabia nor in Greenland). A category is the end-product of a bottom-up exemplar-driven procedure - let us refer to it as categorization - which collects elements sharing some relevant properties. Birds are characterized by the capacity to fly, lay eggs, etc. Once the category BIRD has been defined via the cognitive procedure that recognizes peculiar similarities between (mental) objects, new members can be added via a top-down procedure: and this concerns not only "regular" birds as condors or parrots but also "less regular" ones such as penguins or dodos (see Sammarco 2021: 234).

2. The "ad hoc categories"

The concept of "ad hoc category" (henceforth AHC) was formulated by the psychologist and cognitive scientist Lawrence W. Barsalou in 1983 and published, not

³ In the frame of Cognitive Grammar Langacker (1987: 377-396 and 409-411) considers a category as a *network* of schemas.

⁴ On the notion of "natural category" see Eleanor Rosch's fundamental writings (Rosch 1973; Rosch et al. 1976; etc.).

by chance, in the journal *Memory and Cognition*. The concept was immediately used in linguistics. Barsalou developed his ideas in many books and papers, up to his chapter on "Categories at the interface of cognition and action" which represents, so to speak, a summa of his writings on the subject (Barsalou 2021). After Barsalou's milestone writings a flood of articles appeared in the '90s and in the first two decades of the present century. To quote just the most significant publications, *Folia linguistica historica* issued a special volume edited by Caterina Mauri & Andrea Sansò (vol. 39, 2018), titled "Linguistic strategies for the construction of ad hoc categories: synchronic and diachronic perspectives". The journal *Language Sciences* published a volume (No 81, 2020) edited by Caterina Mauri & Andrea Sansò with the title "Ad hoc categorization and language: the construction of categories in discourse". A book edited by Caterina Mauri, Ilaria Fiorentini & Eugenio Goria and published by John Benjamins appeared 2021: "Building Categories in Interaction: Linguistic resources at work". Other papers are scattered throughout linguistic journals and books, often written by the same authors who contributed to the above-mentioned publications.

As is often the case, new ideas are adopted with enthusiasm and sometimes extended beyond their original limits. In what follows I attempt to take up a stance on the issues which have been discussed thus far in the literature to date.

3. Different types of the "ad hoc categories"

Barsalou's standard and most comprehensive definition of an AHC is as follows (2010: 86): "An ad hoc category is a novel category constructed spontaneously in achieve a goal relevant in the current situation". AHCs are, for instance, "ways to get from San Francisco to New York", "foods not to eat on a diet" etc., which appear to be constructed spontaneously when the co(n)textual situation suggests/needs them. Consequently, an AHC, as Mauri (2017: 299; 2021: 29) states, is the output of a bottom-up, goal-driven and context-dependent process abstracting from specific exemplars (e.g. foxes, pheasants, and wild boars) in a particular situation.

The difference between category and categorization is crucial. Mihatsch (2018: 148) correctly writes that "[t]he term 'categorization' refers to the assignment of a category to an individual": this is correct, although I would prefer assigning an individual to a category. However, "categorization" may also mean the creation of a category via the bottom-up procedure previously alluded to. Given that AHCs are highly context- and situation-dependent and people construct them to achieve their

ad hoc communicative goals, the question arises: are there limits to AHCs or, as Barsalou (1999: 578) maintains, the number of human categories is essentially infinite? To give a plausible answer to this question, it is necessary to have recourse to the linguistic forms AHCs may take on. Mauri (2017: 300) states that there are "non-random correlations between specific morphosyntactic properties and specific ways of abstracting the categories". For instance, in the text

(1) We are in Rome for the weekend. We have plenty of things to do, you know: [visit the Colosseum, stroll through the Gardens of the Villa Borghese, go to the Trevi fountain, and so on...] everything in two days!

the hearer understands that the monuments mentioned are only a part of an AHC which could be dubbed as MONUMENTS TO VISIT IN ROME. The cue for such interpretation is the general extender (see fn. 6) *and so on* and the list functions as an exemplification of the ad hoc invented category, which is created for a particular situation. Let us consider another example proposed by Barsalou (2021) as THINGS TO PACK IN A SUITCASE (properly a "goal-derived category"). If one limits oneself to mention *toothpaste, toothbrush, socks* and *pants* without finishing the list by *etc.* or *and so on*, or at least by a suspensive tone, the interlocutor is entitled to ask: "Any other thing?".

In other words, a "more-to-come" element⁵ (*and the like, and so on, things like that,* etc.) indicates the creation of an AHC. The list that forms, so to say, the *incipit* of the AHC (in ex. (1) the Colosseum, the Gardens of the Villa Borghese, the Trevi fountain) is characterized by the "syntagmatic concatenation of two or more units of the same type" (Masini et al. 2018: 50), whereby "same type" is to be intended as the "syntactic and functional same type", since we have seen that an AHC can contain elements of very different nature, like foxes and pheasants. In their introduction to Mauri et al. (2021: 2), Mauri, Fiorentini, & Goria give a list of "special strategies" used to build AHCs: marked prosodic and morphological patterns, reduplication, associative and similative plurals, list constructions, exemplification, and general extenders.⁶ In other words, linguistic data can reveal the process of category construction: linguistic

⁵ Cp. Goria & Masini 2021: 75.

⁶ The "general extenders" such as *and so on, etc., something like that* represent a strategy of abstraction done by the speaker that may include also non-specific items: see Mauri & Giacalone Ramat 2015 (particularly on Japanese *-tari*), Mauri & Sansò 2018. Moravcsik 2020 offers a taxonomy of AHCs expressed by plurals (for instance the 'similative plurals' as Telugu (tel; Dravidian, South Dravidian) *puli-gili* 'tigers and such' (*puli* 'tiger'). On "echo words" see below, fn. 8).

means/strategies are needed to form a category– and more specifically an AHC, which indicates an ensemble of similar/analogous material or conceptual things– be it a connective item like the Japanese *toka* in

(2) Japanese (Barotto 2018: 44)

 $K\bar{o}h\bar{i}$ toka $k\bar{o}cha$ toka iroirona mono-ga arimashita coffee TOKA tea TOKA various_{ADJ} hing-NOM exist_{POL:PAST} 'There were various things such as coffee and tea.'

or the "echo compounds" that are formed, as in Lezgian,⁷ "by reduplicating nouns in such a way that the onset of the first syllable of the second member is replaced by *m*-. The meaning of such *N m*-*N* compounds is "*N* and similar things" (Haspelmath 1993: 109; my emphasis), so that we get *sik*'~*mik*' "fox and other wild animals' (*sik*' 'fox').

Both the "echo compounds"⁸ and the *toka*-connectives are categorizing tools, i.e. "categorization triggers" (see Mauri & Sansò 2018b: 1). Goria & Masini (2021: 78) distinguish between "categorizing" (or "category-building") lists and "lists that implicitly rely on some presupposed category" as in Rosch's "natural categories" like ANIMALS or STARS (see fn. 4).

As we have seen (cp. ex. (2)), not all AHC markers must systematically occur at the end of the list completer slot like *and so on* or *and the like*. Italian *tipo, che so* (properly, a one-word: [ke's:o], just as English *dunno*; see fn. 10) 'I don't know', and French *genre* introduce the AHC. The following example is drawn from a corpus of spoken Italian mostly used by internet-newsgroups as reported by Lo Baido (2018: 80):

(3) Mi ha chiesto cose **tipo** Moby, Eminem, Saggy **insomma** che non siano solo dance un po' misto ecco.

'(S)He asked me for things **tipo** Moby, Eminem, Saggy **in sum** that are not only dance, a little bit mixed, I mean.'

⁷ lez; Nakh-Daghestanian, Lezgic.

⁸ The echo-word construction, a non-canonical reduplication, is attested in various languages: see, for instance, Turkish *Dergi mergi okumuyor*/Newspapers M:ECHO read:NEG:PRES , '(S)He does not read newspapers and the like' (Stolz 2018: 248; see also Stolz 2003/04: 11). Magni (2018: 204) speaks for such cases of "echo twin strategy". Kallergi (2015: 18 -as well as Haspelmath 1993: 109) considers this construction not only as signalling vagueness but also somehow deprecative, pejorative (and this is quite understandable as the consequence of vagueness, uncertainty).

A sentence like **Mi ha chiesto cose Moby, Eminem, Saggy tipo, insomma che non siano solo dance, un po' misto ecco,* showing *tipo* at the end of the list, would be impossible. *Tipo* and its equivalents in other languages (French *genre, espèce,* Spanish and Portuguese *tipo*, Russian *tipa* (GEN), English *kind, type, sort*)⁹ usually introduce the AHC. One element is sufficient to create the AHC:

 Una piccola polemica "elegante" tipo Accademia della Crusca (L. Romano, 1969, Le parole tra noi leggere, quoted by Voghera 2013a: 296).

The mention of the Accademia della Crusca, a well-known and precisely defined object, is sufficient to create the category ACADEMIES WITH *ELEGANT* DISCUSSIONS. The Accademia della Crusca is the exemplifying placeholder which frames the conceptual space it belongs to (cp. Lo Baido 2018: 86).

3.1. On general extenders

Contrary to *tipo* and its above mentioned equivalents such as *kind*, *genre*, et sim., the general extenders *che so*,¹⁰ *I don't know*, *que sais-je* et sim., are (or, at least, originally were) sentences *per se* and though sometime used inside the AHC list (see the example of *chi sacciu*, fn. 9), they usually close the AHC, often using a suspensive tone:

(5) a. *C'est comme l'entente sur les soins de santé ou que sais-je*'It is like the health care deal or whatever.'
b. *Il aurait pu m'envoyer une note, un accord que sais-je?...*'He could have sent me a note, an agreement, whatever.'

⁹ On Italian *tipo* and related forms see Voghera 2012; 2013a; 2013b.

¹⁰ See De Mauro 2000: 444, (s.v. *che*) "e altre cose dello stesso genere: *aveva tutte le qualità era brava, bella, gentile e che so io*", lit. 'she had all the good qualities: she was skilful, beautiful, courteous **and what I know**'. Lo Baido 2023 has studied the corresponding Sicil. *chi sacciu*, lit. 'what do I know', i.e. 'I don't know, I dunno'. She underlines the "basso grado di coinvolgimento assertivo al fine di dichiarare lo status ipotetico ed esemplificativo di alcuni *items*" (p.140: 'the low commitment of the speaker in order to underline the hypothetical and just exemplifying role of some items'); *ci poi regalare chi sacciu na penna, un portachiavi bonu* 'you can give him/her as gift, **chi sacciu** (what I dunno) a pen, a fine key chain', Lo Baido, loc.cit, ex. (31): the pen and the fine key chain are representative of the open list that forms the AHC 'THINGS TO BE GIVEN AS GIFT (IN A PARTICULAR OCCASION)'. Lo Baido (p.c.) adds that *chi sacciu* may occur also at the end of the sentence, just as *che so, I don't know* > *I dunno, and so on, que sais-je*?. On *dunno* and similar forms see further fn. 12.

Similarly to Accademia della Crusca in (4), in (5a) the health care deal is sufficient to represent a category (say STATE MEASURES FOR THE CITIZENS); in (5b) there are multiple elements but a sentence like *Il aurait pu m'envoyer une note, que sais-je?*... would also be fine.

We may conclude that it is not the number of the list members that creates an AHC. However, it is rather rare finding AHC closing expressions (*and so on*, etc.) preceded by just one element as in (6) below. Moreover, not all lexemes have the same capacity to construct an AHC. In my opinion, the sentence quoted by Mauri & Sansò (2018b: 26) does not constitutes a good example of an AHC:

(6) It was some sort of chessboard, you know, not a real chessboard, more like a large, decorated disk, a shield, something like that. A round chessboard–like object.

The speaker refers here to a single object (s)he has problems defining. Contrary to the Accademia della Crusca in (4) and even to *une note, un accord* in (5b), it cannot be ascribed to a specific category nor represent the starting point of a newly *ad hoc* created category ('chessboards', 'shields', 'round objects'?...). On the shortcomings of categorizing on the basis of lexical items see Barotto 2018: 39.

4. Some distinctions among the "ad hoc categories"

The question to be discussed at this point is: are all the previous examples really AHCs? Mauri & Sansò (2018a: 70) make the important distinction between *insiemi* (ensembles) and *classi* (classes) The former are represented, among others devices, by the associative and collective plurals such as the Hungarian suffix *–ék: Jánosék* 'Janos and his relatives', or Japanese *-tachi* in *Tanakatachi* 'Tanaka and people associated with him' (Mihatsch 2018: 151; Moravcsik 2020: ex. (12)). Classes may use disjunctive connectives like *or* as in

(7) I came to class but they have a bomb threat or something (ex. (13) in Mauri & Sansò 2018a).

Clearly, *-ék* and *-tachi* are not goal-derived AHCs in Barsalou's sense (see above, section 3), whereas the general extender *or something* in (7) builds the class EVENTS THAT KEEP STUDENTS OUT OF THE CLASS.

4.1. Ad hoc categories and collective nouns

A further point that can help us to better understand the concept of AHC deserves to be underlined in the frame of the general discussion that appears in recent publications: the collective nouns (or "aggregates") like Italian *fogliame* 'foliage', *vasellame* 'tableware' *ciarpame* 'rubbish, junk', studied by Magni (2018) are not AHCs, even less goal-derived AHCs. They are regular entries of the Italian dictionaries, not bound to a particular situation. The *–ame* suffix can also be attached to proper nouns of celebrities or well-known politicians to denote the set of persons, ways of acting, situations whose pivot is the proper noun: *Berlusconi* \rightarrow *berlusconame*, is yet a nonce-noun¹¹ strictly bound to the popularity of Berlusconi. It might well be that it be registered in the future in some (historical) Italian dictionary. At the present moment I would say that *berlusconame* is *–* or, better, has been– on the way of becoming an AHC.

As for the Italian nouns with the collectivizing suffix *–ume* (*marciume* 'rot, rottenness' (*< marcio* 'rotten'), *sudiciume* 'dirt, filth' (*< sudicio* 'dirty', and the like), we observe that a sentence as

(8) Si vede dappertutto sudiciume e così via (/e simile) (or other AHC-markers).
'One can see everywhere dirt and so on' (my own example).

would sound very strange, since *sudiciume* does not constitute a category, but just a state of affairs or an ensemble of things that are dirty (but not *dirty and so on*!). Collective nouns (*aggregates*) can be specified: e.g. *sudiciume* may be the cover noun for *gums, stubs, empty cans,* etc. Consequently, *sudiciume* may be for the speaker the starting point for constructing an AHC as in *I saw in that rave party just sudiciume, marciume, sfasciume* ['junk'] *and things like that.* Mauri & Sansò (2018b: 23; my italics) write: "Collective and aggregate markers are among the *morphological strategies* used to encode ad hoc categorization across languages". It is, however, important to repeat that aggregates, collectives, like the *pluralia tantum* (e.g. Lat.

¹¹ As already said in fn.8, Haspelmath and Kallergi note the generally pejorative connotation of some *ad hoc* categorization triggers like 'echo-words' (mentioned in section 3). The same holds for the ephemeral creations like *berlusconame* and the *–aglia* collectives as *salvinaglia* 'people and/or affairs around the rightwing politician Matteo Salvini', that is analogically formed on *marmaglia* 'riff-raff', *gentaglia* (*<gente*) 'rabble, scum', *teppaglia* (*<teppa*) 'hooligans' etc., i.e. on pejoratives which are completely lexicalized -along with non-pejoratives as *boscaglia* (*<bosco*) 'boscage 'or *nuvolaglia* (*<nuvola*) 'mass of scattered clouds' (Magni 2018: 212; Arcodia & Mauri 2020).

deliciae 'delight', *divitiae* 'richness') are not AHCs, i.e. categories created under particular circumstances. Intrinsically, *fogliame*, which, as said above, belongs to the Italian lexicon, denotes *per se* an amount of leaves, without any further specification, no matter whether the leaves are from a fruit tree, an oak or a pine. On the other hand, when the speaker alludes to THINGS TO PACK IN A SUITCASE the hearer expects that the speaker specifies which objects have to be put in the suitcase as there is no collective noun referring to such things.

Furthermore, we have to distinguish between grammatical(ized) tools like collectivizing suffixes (as It. *–ame, –ume*) and spontaneously, mainly conversationally, created expressions such as *and things like that*, or *I dunno, que sais-je, che so* (*io*), *was weiß ich, quién sabe, ne znayu*: these expressions are stereotyped and belong to the common language use ('Sprachschatz'), but they are not grammatical tools. They can be used to signal the creation of AHCs. In short, there is not only a division between "natural categories" and AHCs, but the latter are further divided into morphological and conversational building strategies of languaging.¹²

4.2. The languaging activity

Inglese & Geupel (2018: 228 and 236) present sentences with a list of examples, introducing, following Mauri 2017, the threefold division in sets, classes, and frames with the following examples:

(9) a. I need flour, milk, yeast and so on (= a set).
b. You can read a book, make a drawing or something (= a class).
c. You order, wait for food, urge the waiter because you are hungry, then wait again and so on (= a frame).

¹² According to Mauri & Sansò (2020), languaging is "the process of making meaning and shaping knowledge and experience through language [...]. *Languaging* thus refers to the activity performed in speech, which is an ongoing process constantly evolving and developing". French linguists make use of the more or less corresponding NP 'activité langagière', which underlines the dynamic process (see, for instance, Bronckart 2007). Recurrent discourse patterns in the languaging activity may lead to stereotyped forms in a constructionalization process, as might be the case of *I dunno* from *I don't know*, or French [ʃə'pa] from *je (ne) sais pas*, used as general extenders marking indefiniteness at the end of a list (see Traugott & Trousdale 2013: 20, who speak of constructionalization as the creation of a form_{new}–meaning_{new} pairing).

The three sentences do contain AHCs, though they represent different situations. This means that AHCs can be created via a large set of sentence types, and are not bound to a particular syntactic structure.

van der Auwera & Sahoo (2020: ex. (2a)) say that in a sentence like

(10) I want such a cat.

the function of *such* is to create an AHC during the discourse: contrary to the indefiniteness of the object alluded to in (6), the wanted cat is a definite exemplar of a newly created category, namely, CATS ENDOWED WITH THIS AND THAT PROPERTIES. Accordingly, it is quite possible that there are no limits to category building, provided that appropriate cues, like *such*, mark the sentence as an AHC.¹³

A second, crucial distinction obtains between activity and category: in the section "Lexicalization of goal-derived categories" in his 2021 article Barsalou (2021: 57) states that there is a surprising number of goal-derived categories that are lexicalized and he considers "the activity of eating and lexicalizations of categories associated with its important semantic roles, such as *diner* (agent), *food* (object), *utensil* (instrument), *eatery* (location), and *breakfast* (time)". Simple nouns such as *cat* or activities such as 'eating' can potentially be capable, via a bottom-up procedure, of opening the way to a (natural) category FOOD, composed of hamburger, sandwich, egg, bread, salmon, and so on. In turn, hamburger may be considered as a member of the sub-category BURGER, together with cheeseburger, fishburger, veganburger, and so on. Conversely, also Rosch's "natural category" BIRDS could also be a subcategory of ANIMALS and ANIMALS a subcategory of LIVING BEINGS. The risk of an endless (sub-)categorizing process is evident. Paradoxically, this seems to be in keeping with Smith & Samuelson's thesis (1997) that all categories are ad hoc and natural taxonomic categories like BIRDS, HUMANS, etc., do not exist and their lexicalization can be very arbitrary and different according to different cultures. Casasanto & Lupyan (2015) argued that there are in fact no stable categories that would be entrenched ready-made in people's minds: all categories emerge from current situations since people create them on the fly (see Moravcsik 2020). Consequently, one

¹³ A distinction which is not always observed has to be kept in mind: namely, the distinction between linguistic tools introducing/concluding an AHC and the AHC in itself. It is not appropriate to write that "French *tel* or English *such* [...] are essentially one-member categories" (van der Auwera & Sahoo 2020: conclusion): *tel* and *such* are linguistic tools capable to introduce/signal categories (and even one-member categories), but *per se* they are not a category.

could conclude that the very concept of category is useless, a conclusion which seems very counterintuitive, if we consider what we know about cognitive psychology and cognitive strategies such as making mind maps, association, mnemonics, etc.

5. Conclusion

As discussed above, the boundaries of a category and of an AHC may often be rather fuzzy in the sense of Wittgenstein's *Familienähnlichkeit* (family resemblance). Chauveau-Thoumelin (2018: 186) maintains that "a category with fuzzy boundaries [...] is context depending". The more the category X is vague and undetermined, as is particularly the case with AHCs, the more examples are necessary to define the category by general extenders (see ex. (1), list constructions (ex. (9a)), lexemes such as *genre, problem, question,* defined by Chauveau-Thoumelin (p. 191) as "shell nouns":

(11) C'est pour un roman historique, genre Dumas

'It's for a Dumas-like historical novel.' (Chauveau-Thoumelin, 2018, ex. (3))

However, as we have seen in the previous sections, AHCs with just one example as in (6) are not frequent and even "shell nouns" like *genre, tipo* offer many instances with more than one example:¹⁴

(12) Il existe de tout petits bacs de 250 ml avec de nouveaux parfums genre bergamotte, marron glacé, spéculoos, absinthe, chocolat blanc.
'There are tiny, 250 ml containers with new gourmet flavours like bergamot, marron glacé, speculoos, absinth, white chocolate.' (Chaveau-Thoumelin, 2018: 183)

We may conclude that the classical, traditional definition of category, as reported above (section 1), does not apply to the AHCs. If we accept the rigid definition given in the dictionaries, then we should find a different name for the AHC, e.g., "ad hoc ensemble", or "ad hoc group". However, the term "ad hoc category" has already

¹⁴ An anonymous reviewer notes that a quantitative study would be needed. This is correct from a theoretical viewpoint. However, given the unlimited possibility of new AHCs and the absence of a dedicated corpus, it is practically unfeasible. As I said at the beginning of this paper, my examples are drawn from the extant literature.

acquired a respectable citizenship among linguists and so we will go on speaking of AHCs. The aim of my reflections, discussing the recent literature, has simply been to observe that "ad hoc categories" are a very particular type of "category", a construct endowed with its particular rules.¹⁵

Abbreviations

ADJ = adjective	NOM = nominative
GEN = genitive	PAST = past
ECHO = echo-word construction	POL = polite register
M = masculine	PRES = present
NEG = negation	

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¹⁵ The following sentence I have found in the DWDS (see fn. 2) is telling enough about the terminological difficulties: "*Diese kollektive Identität bestimmt den Kreis derer, die sich als Angehörige derselben sozialen Gruppe verstehen und von sich unter der Kategorie der ersten Person Plural sprechen können*". 'This collective identity defines the **circle** of those people who consider themselves as belonging to the same social **group** and may speak about themselves using the **category** of the first plural person' (my emphasis, Habermas 1981: 95). Habermas uses here 'category' in the sense linguists refer to morphological distinctions while 'group' in such a context means 'category'. It is a good example of how fuzzy definitions can be.

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