Italian colour terms in the BLUE area: synchrony and diachrony

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1. Brief survey of the literature

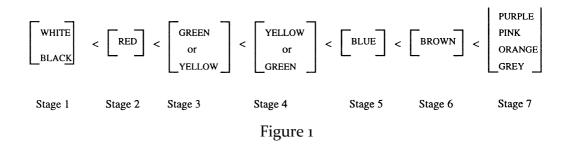
The linguistic encoding of colour – i.e. the existence of a continuum that different languages break into arbitrary discrete segments and the evolution towards ever more complex and differentiated colour-naming systems – is a privileged topic for both ethnolinguistics and psycholinguistics. Semantics also frequently refers to colour terms for illustrating theoretical issues. Colour terms are of course also the subject of specific research.

Colour-naming in its different aspects (linguistic, perceptive, cognitive, cultural) has been a privileged area of research for linguists, psychologists and anthropologists since the 19th century. Grossmann (1988), a study on the semantics of colour terms in Catalan, Spanish, Italian, Romanian, Latin and Hungarian, includes a history of the literature and an interdisciplinary bibliography of about 1300 studies on the colour-naming systems of different languages published between 1814 and 1987. The number of works published after this date is so high that we shall only be able to mention a few here.

The "space" of colour names, whose referent is the colour space, is made up of the semantic structure of a set of lexemes. The linguistic encoding of the perceptual and physical substance of colours implies a generalization process: each name refers to a group of shades, abstracting away from the differences among them. Different languages segment the colour space in different ways: the boundaries of individual categories may fall in different places; there may be differences in: the number of available terms, the basis for making distinctions, the weight attributed to the three psycho-sensorial variables of colour, i.e. *hue* (what a layman refers to when talking about colour by classifying his/her perception as 'green', 'red', etc.), *brightness* (the variation in intensity, passing from lighter to darker shades), *saturation* (the percentage of pure hue in a colour; saturation is higher when the colour appears to be less blended with white). The assessment of differences between languages should also take account of other factors such as: in some languages, colour terms can also include information about other factors besides the three aforementioned variables (succulence vs. desiccation, features of surface texture, features of shape and consistency, etc.); often, apart from identifying a given shade, colour names can be used as symbols for representing social, religious and moral concepts of varying complexity. Also, intralinguistic differences can emerge based on variables such as age, gender, education and social status of speaker.

The most recent studies on colour terms can be framed in the more general debate regarding linguistic relativism vs. universalism. The seminal work in this respect is the 1969 book by Brent Berlin and Paul Kay. Their research was aimed at demonstrating both the existence of universals in colour lexicons and the presence of an evolutionary connection between these universals and the historical development of languages. According to these two scholars, there exists a universal inventory of eleven perceptual categories that act as psychophysical referents for basic colour terms (two to eleven) in each language. These terms have a number of characteristic features: from the *morphological point of view* they are not complex; from the semantic point of view they are not transparent, they are not hyponyms of other terms and their application is not restricted to specific classes of entities; from the *psychological point of view*, they are salient to speakers. Non-basic colour terms, on the other hand, are morphologically analysable, semantically transparent and generally more recent than basic terms. When a language encodes less than eleven categories, according to Berlin and Kay, restrictions apply to the categories that are actually encoded. As to the historical evolution of the colour lexicon, it is assumed

that the encoding of the eleven universal perceptual categories takes place, as shown in Figure 1, in a partially fixed chronological order of seven evolutionary stages (Berlin / Kay 1969: 4):



Berlin and Kay's (1969) book was a "revolution" in colour-naming studies. It attracted vast consensus, but also widespread disagreement, and literally boosted research aimed at validating or invalidating the theory of the two scholars. We shall mention but a few of the many partial revisions and successive elaborations of Berlin and Kay's theses. Kay (1975) revisited the temporal order in which focal points are encoded by introducing the GRUE category and established correlations between the evolution of colour term systems and the synchronic heterogeneity of a linguistic community. It was again Kay, this time in collaboration with McDaniel (1978), who introduced: a) the distinction, based on the neurophysiology of colour vision, between "primary", "composite" and "derived" colour categories; b) the reinterpretation of the evolutionary sequence, no longer seen as a successive encoding of new focal points but rather as a differentiation of previously existing primary colour categories. The two scholars maintain that the number of basic terms in a language can be higher than that assumed by Berlin and Kay and that their number can vary even within one and the same linguistic community (Kay / McDaniel 1978: 640-641). Other important studies were authored by Kay et al. (1997), Kay / Maffi (1999, 2013) and other scholars who worked on the data collected for the World Color Survey (Kay et al. 2009; http://wwwi.icsi.berkeley.edu/wcs/) and the Mesoamerican Color Survey (MacLaury 1997 and other studies in the "Vantage theory" framework). A different interpretation of the evolutionary sequence was proposed by Wierzbicka (1990) who sees the development of new basic colour terms as a consequence of the differentiation of complex concepts and not as the emergence of new focal points.

After the publication of Berlin and Kay's book, trying to answer the question whether the number of basic terms could be increased past the eleven mark has been a frequent challenge for colour vocabulary studies in individual languages. Actually, the authors themselves did not rule out the possibility that 12 basic terms could exist. The status of the Russian terms *sinij* 'blue / dark blue' and *goluboj* 'light blue' and the Hungarian *piros* 'red'' and *vörös* 'red²' was in fact left open: on the one hand Berlin and Kay admit the possibility that all could be basic (thus raising to 12 the number of basic terms in those two languages), on the other hand they also consider the possibility that *goluboj* and *vörös* are secondary terms that denote different shades of the basic terms *sinij* and *piros* (Berlin / Kay 1969: 35-36, 95, 99).

The dichotomy between the Hungarian terms *piros* 'red" and *vörös* 'red²', pointed out by Berlin and Kay, generated interest in many scholars (cf. Grossmann 2006, Uusküla 2011, Benczes / Tóth-Czifra 2014, and their references). Other analyses in the RED area have been carried out as regards the distribution of *vermell* and *roig* in Catalan (Grossmann 1988), *rojo, colorado* and *encarnado* in Spanish (Grossmann 1988), *vermelho, encarnado* and *roxo* in European Portuguese (Correia 2006, Schäfer-Priess 2010, Silvestre et al. 2014), *červený* and *rudý* in Czech (Uusküla 2011). In the BROWN area, Forbes (1979, 1986, 2006) studied the dichotomy between *brun* and *marron* in French.

The disputed status of the Russian terms *sinij* 'blue / dark blue' and *goluboj* 'light blue' ignited an interesting debate among linguists, psychologists and anthropologists. There is a vast literature on the subject, including works by a group of researchers at the University of Surrey (Corbett / Morgan 1988, Morgan / Corbett 1989, Moss et al. 1990, Davies / Corbett 1994, 1997, Laws et al. 1995, Davies et al. 1998, etc.) and various Russian scholars (discussed in Paramei 2005, 2007). These studies are based on experiments with informants (work with colour arrays – naming, mapping, identifying focal point; color-eliciting tasks, etc.), occasionally in combination with an analysis of corpus-based frequency, derivational potential and collocational preferences of the terms. While there is agreement upon the fact that

both terms are basic and vary on the brightness axis (*goluboj*, light vs. *sinij*, dark), recent research singled out the existence of differences in their combinatory possibilities and in their figurative, connotative and symbolic meanings. An interesting research angle is provided by Taylor et al. (1997): The authors, who build on MacLaury's "Vantage theory", underline the partial overlapping of the distribution of the two lexemes and assign a "dominant" role proper of a basic term to *sinij* as opposed to a "recessive", non-basic status to *goluboj*.

Berlin and Kay's book and, more specifically, the debate on the status of *sinij* and *goluboj* ignited a vast number of specific studies on the BLUE area also in other languages, such Ukrainian and Bielorussian (Hippisley 2001, Starko 2013), Polish (Stanulewicz 2010, Skuza 2014), Old English (Biggam 1997), Old French (Schäfer-Priess 2011), Catalan (Davies et al. 1995), Modern Greek (Androulaki et al. 2006, Athanasopoulos 2009), Nepali (Bolton et al. 1980), Turkish (Özgen / Davies 1998, Rätsep 2011), Maltese (Borg 2011), Udmurt (Ryabina 2011), etc.

The literature on colour terms in Italian is rather substantial. Most of the studies, be they on the entire set of colour terms or specifically on the nearest equivalents of *sinij* and *goluboj*, were published after Berlin / Kay (1969). Among studies published before Berlin / Kay (1969), attention should be drawn to two studies moving from a Romance perspective: Martius (1947), a dissertation on the BLUE area, and Giacalone Ramat (1967), a wide-ranging paper on colour terms of Germanic origin. In outlining the history of *blu*, Giacalone Ramat also dwells on the semantic relationships between *azzurro*, *blu*, *celeste* and *turchino* in contemporary Italian and observes that *blu* took over *azzurro* as the term used for all the shades of the BLUE area.

Also the works by Kristol and Grossmann move from a Romance perspective and, from the methodological point of view, are couched in the framework of lexical semantics. In his book, Kristol (1978) analyses Italian colour terms both from the synchronic and the diachronic point of view; in Grossmann's monograph (1988; cf. also Grossmann / Mazzoni 1972, 1976) the typological overview of different naming systems is mainly from a synchronic perspective and the description of the historical evolution of colour terminology is limited to Catalan. With respect to the BLUE area, Kristol comes to the conclusion that *azzurro*, the dominant term in the area, was historically present only in the written language and absent in the dialects, and entered the spoken language only after the political unification of Italy. Also in written language, *celeste* denotes light shades whereas *turchino* and *blu* denote darker shades of the BLUE area (the *turchino - blu* dualism is accounted for by the purist preference in the 19th century for *turchino* to the detriment of *blu*, a word of French origin). According to Kristol, both *celeste* and *blu / turchino* are common in dialects, with a predominance of *blu*. Grossmann (1988: 170), based on data from lexicographic sources and informant interviews, underlines that in some speakers' opinion *azzurro* denotes a shade in-between *celeste* 'light blue' and *blu* 'dark blue', whereas for others its meaning is similar to *celeste* and both are in opposition to *blu*. Grossmann further underlines that the extension of one of the two terms, *azzurro* or *blu*, or both, as also their degree of usage are subject to diatopic, diastratic and diaphasic variation.

RED, YELLOW and BLUE are the subject of a recent work by Skuza (2014). Building on previous synchronic and diachronic studies on the colour lexicon in Italian and Polish, the author broadens the research field to a number of ethnolinguistic and cultural aspects. Mention should also be given to Ronga (2009) where the author examines from a historical perspective the linguistic and cultural factors that led to the "exception of blue" in Italian, as opposed to other European languages.

Many recent psycholinguistic studies on the BLUE area in Italian adopt methodologies similar to those adopted by the aforementioned studies on Russian and other languages, i.e. they are based on naming experiments and elicitation tasks and, in some cases, on identifying collocational preferences. Among them: Paggetti et al. (2011), Sandford (2012), Valdegamberi et al. (2011), Paggetti / Menegaz (2012, 2013), Paramei / Menegaz (2013), Bimler / Uusküla (2014), Paramei et al. (2014), Uusküla (2014), Paggetti et al. (2015). The overall findings confirm that naming the area in Italian requires at least two basic terms, *blu* plus *azzurro* and/or *celeste*, and show that the prototypes for the latter two and their interrelationship are determined by diatopic factors. It is further shown that *blu*, apart from denoting dark shades, can also act as hyperonym for the two other terms. Significant in this respect are the answers to a task on hyponymy relations collected by Sandford (2012: 287): "Kind of BLUE' task responses show that 93% of Italian informants responded affirmatively to *azzurro* as a kind of *blu*, and 100% affirmed that *celeste* is a kind of *blu*, but *blu* is not a kind of *azzurro* or *celeste*. Only 10% of informants claimed that *celeste* was a type of *azzurro*." The author claims that even though both *blu* and *azzurro* maintain their status as basic colour terms in contemporary Italian, *azzurro* is experiencing a gradual recession.

The structure of naming systems that fall within our interest has also been studied in other Romance languages spoken in Italy and Italo-Romance dialects. Kristol (1979, 1980) authored two specific studies on the history and usage of azzurro, blu, celeste and turchino in Italo-Romance dialects. Based on data extracted from material collected in the period 1919-1927 for the linguistic and ethnographic atlas of Italy and Southern Switzerland by K. Jaberg and J. Jud (Sprach- und Sachatlas Italiens und der Südschweiz, Zofingen, Ringier, 1928-1940), Kristol identifies regression phenomena, i.e. a system that is poorer when compared to Latin, and claims that Italian dialects are basically a "museum" of the different evolutionary stages of the colour lexicon. Data also support Kristol's (1978) findings on the status of azzurro. Vincent (1986, cf. also 1987) points out an interesting coexistence in Naples of three forms, ble, bleu [blø] and blu. These are different and independent adaptations of the French term *bleu*, whose usage is influenced by diastratic and diaphasic factors. Sardinian colour terms have been studied by Giacalone Ramat (1978) and Wolf (1985). Giacalone Ramat (1978) points out a dialectal differentiation as regards central terms in the BLUE area: Southern dialects use an Ispanism, asúlu (< Sp. azul 'blue') as central term, whereas the Italianism *biaíttu* (< It. *biadetto* 'bluish' or Medieval Lat. *bladictus*) is widespread in Northern dialects. One should also remember Zörner (2005), a study on the colour lexicon in some Piedmontese and Franco-Provençal dialects spoken in Northern Italy.

Various morphological features of Italian colour terms, i.e. patterns for forming derived and compound words, have been studied in Grossmann / Mazzoni (1972), Grossmann (1988), Elwert (1989), Koura (1992), Timmermann (2002) and D'Achille / Grossmann (2013).

There are also specific works on the figurative, idiomatic and symbolic meanings of Italian colour terms. Among them, with specific reference to new coinages, the rather substantial study by Fresu (2006) and, in a contrastive perspective, Arcaini (1993, 1996) on Italian and French, Philip (2003, 2006) on Italian and English, Bronowski (1998) and Skuza (2010, 2014) on Italian and Polish, Ross (1989) on Italian and Dutch, Bocz (2012) on Italian and Hungarian. Further research dealt with traductological (Pierini 2000) and acquisitional (Mecacci / Serafini 1987) aspects of the colour lexicon.

2. Latin colour terms in the BLUE area

The terms of the BLUE area in Latin were rather limited as opposed to other areas of the colour space, such as RED or YELLOW. The term with the broader meaning in the BLUE area was *caerul(e)us* (cf. André 1949: 162-183, Giacalone Ramat 1967: 184-187, Kristol 1978: 220-228, Grossmann 1988: 111-112). Caerul(e)us is derived from caelu(m) 'sky', but the relationship between the two terms was most likely no longer transparent to speakers, who primarily used *caerul(e)us* for denoting rather dark shades of blue, which in particular contexts tended to black or green. It was used for describing the colour of the sky, the sea, the blue band in a rainbow and a colouring agent. Also cyaneus and lividus denoted dark shades: the first term, of Greek origin, described the colour of the sky, of sapphires, birds, etc., whereas the second mainly referred to the purplish blue colour of the skin following a trauma. As for light shades, with particular reference to eyes, *caesius* was used for describing those tending to grey, whereas another Grecism, glaucus, referred to greenish shades. The adjective venetus, that denoted in particular one of the colours of the auriga in the circus, probably originated from the ethnic noun Venetus, name of the inhabitants of the area where a specific corporation of charioteers originally came from. André (1949: 224-229) also points out a number of adjectives derived from these terms: subcaerul(e)us and sublividus, for shades near to caerul(e)us and *lividus*, and *livens*, a deverbal adjective denoting the state of being *lividus*.

The colour lexicon of the BLUE area in Romance languages reflects a thorough renovation when compared to Latin. None of the original Latin terms has a direct Romance continuation, with the sole exception of *venetus*, preserved in Romanian (*vânăt* 'purplish dark blue, livid'; *vânătă*, an ellipsis of the noun phrase *pătlăgea vânătă*, is also the name for 'aubergine') and in a few Southern Italian dialects. The basic terms of the majority of Romance languages either come from Persian through Arabic (Sp. and Port. *azul*, It. *azzurro*) or are of Germanic origin (Fr. *bleu*, Cat. and Occ. *blau*, It. *blu* through French); only Romanian uses a term of Latin origin, *albastru*, whose etymon **albaster* derives from *albus* 'white'. It should be noted that some of the aforementioned Latin terms can be found in Italian, i.e. *ceruleo* or *cerulo* 'light blue', *cesio* 'light blue', *glauco* 'greenish blue', *livido* 'purplish dark blue, livid'. These terms are learned words borrowed from Latin and, with the exception of *livido*, typical of the literary register. They are attested since the earliest times of the history of Italian and are still in usage.

3. Italian colour terms in the BLUE area

The availability of large and searchable corpora makes it now possible to deepen the study of the distribution of the central terms, i.e. *azzurro, blu, celeste* and *turchino*, from both a diachronic and a synchronic perspective. Our research focuses on the semantic relations between these terms at different stages of the development of the Italian language, up to contemporary Italian. The data we will be discussing are taken from the following corpora:

- la Repubblica (newspaper texts dating from 1985 to 2000, roughly 380M tokens), http://sslmitdevonline.sslmit.unibo.it/corpora/corpus.php?path=& name =Repubblica
- DiaCORIS (different kinds of prose texts dating from 1861 to 2001, roughly 25M tokens), http://corpora.ficlit.unibo.it/DiaCORIS/
- PTLLIN (literary prose texts dating from 1947 to 2006), DVD-ROM
- OVI (Old Italian texts dating before 1375, roughly 23M tokens), http://gattoweb.ovi.cnr.it/

- MIDIA (various types of texts dating from the 13th century to 1947, roughly 7.5M tokens), http://www.corpusmidia.unito.it/
- BIZ (literary texts from early Italian to the first decades of the 20th century), DVD-ROM
- BADIP Corpus LIP (different types of spoken texts recorded in the period 1990-1992 in Milan, Florence, Rome and Naples, roughly 0.5M tokens), http://badip.uni-graz.at/it/.

To start with let us briefly recap the history of *azzurro*, *blu*, *celeste* and *turchino*.

Azzurro, as we anticipated, is a Persian word (*lāžward*) that entered into Italian through Arabic. It is attested in Latin already in the 9th century as *lazurus* and in 13th century Old Italian with numerous formal variants (see in TLIO: *accurro*, açuro, açurro, agiur, agiurro, arzuro, azule, azur, azurlo, azuro, azurro, azzuro, laçur, lagiuro, lazuro). Originally, it denoted lapis lazuli. The semantic transformation into a name for colouring agents and into proper colour term had already happened in Old Italian, where *azzurro* was used for indicating the colour of cloths, clothes, heraldry elements and also of the sky (lo die lo cielo azzurro chiaro, e la notte ... quello azzurro più oscuro 'during the day ... the light azzurro sky, and during the night ... the darker azzurro one', Restoro d'Arezzo, 1282). Azzurro also occurs twice in Dante's Inferno and three times in Boccaccio. With respect to Dante, Perrone (2001) points out that the terms of the BLUE area are a mere 2% of the total of Dante's colour lexicon, as opposed to 31% for WHITE, 26% for BLACK, 19% for RED, 14% for GREEN, 8% for YELLOW. In all diachronic corpora azzurro is extremely frequent. It can be found mainly (though not exclusively) in literary texts, where it qualifies the colour of various entities (sky, sea, lakes, mountains, flowers, birds; eyes; gem stones; drapes, cloths, clothes, coats of arms, etc.). The term also frequently occurs as a noun and, especially in treatises on painting, it is a component of phrases that denote colouring agents (azzurro della Magna / d'Alemagna 'azzurro from Germany', azzurro oltramarino 'ultramarine azzurro', etc.). The role of azzurro as the basic term for the BLUE area in written Old and Modern Italian appears to be confirmed by the fact that it is the most frequently

used – even in the oldest times – in lists of colours. Examples are: *Che son queste? son elle rosse? son elle azzurre? son elle nere? non son elle bianche?* 'What are these? Are they red? Are they *azzurro*? Are they black? Or are they maybe white?' (Franco Sacchetti, end of 14th century [referring to bed sheets]); *Altri sono stati di parere che i principali [colori] sieno sette, cioè il bianco, il nero, il giallo, il rosso, il verde, la porpora, e l'azzurro* 'Others were of the opinion that the main [colours] are seven, that is, white, black, yellow, red, green, purple and *azzurro*' (Filippo Baldinucci, *Vocabolario toscano dell'arte del disegno*, 1681).

Blu is a Germanism that entered Italian at the end of the 17th century under the influence of French *bleu*. Originally it was used to qualify the colour of cloths, uniforms or military standards, also in the variant *blo*, *blé* or the non-adapted form *bleu* (Dardi 1990). In diachronic corpora it occurs with a limited frequency and it is also used as a noun. It denotes darker shades and, for the most part, refers to clothes, occasionally objects, eyes, the sea and the sky. The non-adapted form *bleu* can be widely found in the 19th century, when, by way of example, it occurs in a vast number of compounds used in the fashion jargon, such as *bleu sultano* 'sultan *bleu*' (Sergio 2010). The heyday of *bleu* came to an end in the Forties of the 20th century, when the Fascist regime listed it among the foreign terms that needed to be expunged from the Italian language, indicating *blu* as a replacement (Raffaelli 2010). *Blu* in lieu of *bleu* was also championed by the Purist movement in the aftermath of World War II (Messina 1965). Associated with the fortune of *blu* in the fashion jargon is the pseudo-Gallicism *bluette* (the French *bluet* is the common name for 'bluebottle') which denotes a lighter shade in clothes.

In Old Italian we can already find colour terms that can be traced back to the Late Latin term *blavus* (documented in the 7th century, cf. Pfister 1999) which has the same Germanic etymon as French *bleu* (**blēwa*-). These are *bioio* (or *biodo*, *bloio*, *broio*) and *biavo* (or *biado*, *blavo*), used almost exclusively for denoting the colour of cloths (cf. TLIO). The same applies to its derivative *biavetto* (or *biaveto*, *blaveto*, *biadetto*, *biadeto*) and other terms associated with *biavo* (*sbiavo*, *sbiavato*, *sbiadato*, *sbiadato*, *sbiadito*, etc.). In contrast with the modern usage of *blu*, they all seem to denote lighter shades. In the literary, Tuscan-based language, there is a break in continuity

between these terms and *blu*. In texts dating from after the 14th century *biavo*, *biado*, *biadetto* are only occasionally found: *azzurro di biadetto* is a colouring agent mentioned in Baldinucci's (1681) *Vocabolario*; in the 20th century, Pirandello speaks of *occhi biavi 'biavo* eyes' and Montale of *tinte ora scarlatte ora biade* 'hues now scarlet now *biado*'. Many of the modern dialectal forms of *blu* recorded in Pfister (1999) might well be continuators of the Late Latin *blavus*. Others, to the contrary, derive directly from the French *bleu* and entered into the dialects at different times (starting from the Middle Ages), depending on the degree of contact with the French culture.

Celeste formally derives from Latin, but the adjective *caelestis* did not carry a colour meaning in Classical Latin. The semantic shift came about already in Old Italian. The first instances of *celeste* carrying a colour value are found in the 13th century, at a time when the term basically carried the 'celestial' and 'divine' meanings. In some contexts, the meaning of the adjective can be ambiguous (especially when it qualifies light, lamp, ray, etc.). The term can be found in Old Italian in many other forms (see in TLIO: *celeste*, *celesto*, *celestro*, *celleste*, *cielesstre*, cieleste, cielesto, cielestre, cielestro, cileste, cilesto, cilestre, cilestro, zeleste, zelestro, zileste). Among these, cilestro (formed by analogy with terrestre 'terrestrial') would soon acquire an exclusively colour-related meaning, documented in Dante and Boccaccio, but is no longer in use. On the other hand, cilestrino 'somewhat cilestro' has not completely disappeared in literary use. In diachronic corpora celeste is far less frequent as a noun than azzurro. In Old Italian it usually refers to the colour of cloths and clothes, but also of gem stones, and it denotes a shade lighter than azzurro. In more recent literary language celeste is also used in connection with eyes, water, air, a number of objects and occasionally, by way of metonymical extension, even with people who wear this colour.

Turchino derives from *turco* 'Turkish'. It is documented already in the 14th century and it was usually used to qualify cloths, clothes, standards: in the beginning it probably referred to the origin of the cloths and only later to their colour. The term was also used to denote the gem stone commonly known as *turchese* 'turquoise'. Albeit to a lesser extent than *azzurro*, *turchino* is also present in

colour lists, particularly when describing rainbows (*si distinguono sette colori, che possono considerarsi come primitivi, e sono il rosso, l'arancio, il giallo, il verde, il turchino, l'indaco e il violetto* 'One can identify seven colours that can be considered as primitive, and these are red, orange, yellow, green, *turchino*, indigo and violet', Leopardi, 1813). Rather common in dialects, as recorded in Schweickard (2013), *turchino* is not exclusive to literary language. In diachronic corpora it is also used as a noun and it qualifies first and foremost cloths, clothes and various objects, but often also eyes, shadows, the sky, the sea, mountains, the air. Between the 19th and the 20th century its usage spreads to denote the darker shades, right at the time when *blu* becomes an important competitor. As of today *turchino* is an obsolete term that occurs almost exclusively in a limited number of idiomatic expressions, as we shall see. Only in Tuscany can we find some evidence of survival, since it is used along with *blu, azzurro* and *celeste* for naming the colours of the insignia of the 'contradas' (districts) of Siena.

In order to better understand the usage of *azzurro*, *blu*, *celeste* and *turchino* in texts dating from the last decades of the 19th century and 20th century we mainly searched two corpora: *Diacoris* (different kinds of prose texts dating from 1861 to 2001) and *la Repubblica* (newspaper texts dating from 1985 to 2000). Before delving into the analysis of collocations we shall present a few figures. Table 1 illustrates the number of occurrences of the four terms in the reference corpora:

	AZZURRO	BLU	CELESTE	TURCHINO		
Diacoris	1729	446	861	389		
la Repubblica	18555	16938	2965	275		
TT 11						

An analysis of the contexts in which they occur, however, reveals that a part of the collocations can be ascribed to figurative meanings, idiomatic expressions and proper nouns (in the case of *celeste*, mainly to the other meaning of the term, i.e. 'celestial'), with frequent calques from other languages. In order to evaluate the quantitative weight of these contexts, whose variety has significantly increased in the second half of the 20th century for both *azzurro* and *blu*, we made a rough calculation of the occurrences in the la Repubblica corpus, whose texts are more recent and larger in number. The calculations reveal that the percentages of collocations are in the order of approximately 50% for *blu*, 60% for *turchino*, 65% for azzurro, and 75% for celeste. The frequency of this type of collocations for azzurro is ascribable to the fact that it is considered as national colour of the Republic of Italy. The colour was originally used in the standards, flags, military scarves, etc. of the Savoia royal family and became the official colour of the Italian national sports teams. The national jersey is called maglia azzurra, even though the actual shade can be darker or lighter, and azzurro is used, by virtue of metonymic extension, to qualify or denote the athletes, coaches, sites, abstract concepts and ultimately anything that revolves around the national teams. A similar mechanism applies when one or more colours (the so-called "club colours") come to identify a sport club. The terms *azzurro*, *blu*, *celeste*, that are used to indicate the jerseys, flags etc., are also used to refer to the athletes, fans, etc. of the respective clubs (cf. also 3.2. below). The absence of turchino in this type of contexts is probably due to the association with the ethnic noun and adjective turco 'Turkish' that makes it ill-fit as "club colour" for Italian and other non-Turkish sport clubs.

As illustrated in Table 2, *Diacoris* provides us with other interesting numbers as regards the trend of occurrences in the 5 chronological sub-periods to which the texts of the corpus belong:

DIACORIS	AZZURRO	BLU	CELESTE	TURCHINO
1861-1900	305	27	314	121
1901-1922	286	10	90	122
1923-1945	464	32	143	74
1946-1967	429	185	145	54
1968-2001	245	192	169	18

Table 2

Data from the two corpora confirm the hypothesis, expressed in previous studies, that in 20th century Italian – and in particular in the last decades – there is a restructuring of the BLUE area: *blu* is spreading more and more, even to the detriment of *azzurro*, *celeste* holds, whereas the usage of *turchino* is experiencing a sharp downfall.

The four adjectives qualify nouns that roughly belong to the same semantic areas but occur with different degrees of frequency depending on the area. Let us analyze in greater detail the collocations for the three terms that, at present, are the most common, i.e. *azzurro*, *celeste* and *blu*.

All three, and *blu* in particular, qualify first and foremost nouns that denote cloths, clothes and clothing accessories. *Azzurro* and *celeste* denote the lighter shades, *blu* the darker ones: among the most frequent collocations we find, for example, an *azzurro* or *celeste* shirt with a *blu* jacket, sweater, trousers or tie. Darker and lighter shades can be present in one and the same garment, for example a suit or a shirt with *blu* and *azzurro* pinstripes.

With reference to the human body, eyes are *azzurro* par excellence, much more rarely so *celeste* or *blu*, whereas *blu* is selected for skin spots caused by bruises or cyanosis or to indicate the colour that lips turn to because of the cold. *Azzurro* and *blu* are also used with reference to veins and dyes, as is the case for hair, nails or tattooed skin. *Uomini blu* 'lit. blue men' is the common name for the Tuareg people, whose traditional blue veil can occasionally stain the skin.

Both *azzurro* and *blu*, rarely so *celeste*, describe the colour or one of the colours of various birds, butterflies, fish, and occur in names of taxonomic categories (e.g., *sula dai piedi azzurri / piediazzurri* 'blue-footed booby', *volpe azzurra* 'blue fox', a variety of the Arctic fox, *tonno pinna blu* 'bluefin tuna', *orso azzurro / blu tibetano* 'Tibetan blue bear'). It should also be noted that *pesce azzurro* 'oily fish' identifies a class of small fish independently of their true colour.

The colour or colours of some flowers, like iris or windflower, is *azzurro* or *blu*; hydrangeas, bluebells and gentians can also be *celeste*. Fruits and plants such as bilberries, plums and aubergines are *blu*, but also other deteriorated or

contaminated fruits and foods can be said to be *blu* (*mozzarella blu 'blu* mozzarella').

The colour of the sky, and in particular of the day-time bright sky, is mainly *azzurro*, but after sunset it generally becomes *blu*. Both *blu* and *azzurro* denote the colour of the sea, of rivers and lakes, etc. Gem stones like diamonds and sapphires are *azzurro* and *blu* but also *celeste*, which, to the contrary, is only seldom used for the colour of the sky, of the sea, etc.

Artificial light shed by lighting equipment is both *azzurro* and *blu*, but with a sharp preference for *blu* when referring to flashing warning lights.

As for other contexts in which the three adjectives qualify names of inanimate entities, apart from the previously mentioned garments, there are numerous references to the colour of decor, furniture and ornaments, as also of buildings and building materials.

As for the colour of paper and paper products, book covers, graphical signs and instruments for writing and drawing, all three terms are found but with a prevalence of *blu*; the school habit of underlining major mistakes with a *blu* pencil gave rise to the idiom *errore blu* 'lit. blue error' (as opposed to *errore rosso* 'lit. red error' a minor error). *Blu, azzurro* and *celeste* are all used for identifying colouring agents and colours used in paintings.

Blu is slightly predominant over *azzurro*, and much more so over *celeste*, in denoting colours present in flags, standards, banners, etc. In particular, *blu* is the international flag awarded to beaches and marinas that comply with sustainable development criteria. *Blu* is the colour of the United Nations flag and of the helmet worn by the UN troops; *casco blu* 'Blue Helmet' is used as a metonym for the soldiers of the international peacekeeping forces.

Blu is prevalent over *azzurro*, and both over *celeste*, also when denoting the colour of various means of transport, in particular cars, but also airplanes, vessels, etc. Vehicles used by politicians or high public officials or the public administration are called *auto blu* 'official dedicated car' and, by way of analogy, we also have *blu* helicopters, bicycles (and *blu* mobiles, i.e. dedicated mobiles).

The lower number of occurrences of *turchino* in the *la Repubblica* and *Diacoris* corpora makes it more difficult to analyze in further detail the collocational preferences of the term. It denotes darker shades and it qualifies first and foremost garments, but also the sky, the sea, eyes, etc.

Metonymic connections and semantic associations derived from symbolic values account for the presence of the four adjectives, and in particular of *azzurro* and *blu*, in many other contexts not yet mentioned. We shall illustrate but a few examples of stable collocations that occur frequently in our corpora.

Both *azzurro* and *blu* are also "political colours", in the sense that they are symbolically used to represent a political party, its members, constituency, etc. In the past decades, for example, *azzurro* has been associated with the *Forza Italia* party. Further, *azzurro* is associated with newborn males in the expression *fiocco azzurro* 'blue baby ribbon' (as opposed to *fiocco rosa* 'pink baby ribbon') and in general to child protection in *telefono azzurro* 'lit. blue phone', a kind of Childline. *Principe azzurro* 'lit. blue prince', the name for Prince Charming, a typical character of likely French origin that appears in various fairy tales (cf. D'Achille 2011), denotes by antonomasia the quintessential romantic ideal for a male partner or husband. The expressions *fata turchina* 'lit. blue fairy' or *fata dai capelli turchini* 'lit. blue-haired fairy', associated with the character of the novel for children *The Adventures of Pinocchio* by Carlo Collodi, have also become antonomastic and at times are used (also ironically) to refer to a woman who is someone's benefactor, mentor or counsellor.

Denominations such as *tute blu* 'lit. blue overalls' or *colletti blu* 'blue-collars' for laborers (as opposed to *colletti bianchi* 'white-collars'), *cintura blu* 'blue belt' for athletes who reached a given level at karate (as opposed to *cintura bianca* 'white belt', *cintura gialla* 'yellow belt', etc.) are metonymically motivated and they are used with classifying function. *Strisce blu* 'lit. blue stripes' and *zona blu* 'lit. blue zone' are expressions used in the regulation of car traffic and parking, whereas *bollino blu* 'lit. blue sticker' is a certification of proper functioning for cars, devices, etc. Expressions such as *paura blu* 'lit. 'blue fear' or *fifa blu* 'lit. blue fright', which refer to a huge fright that turns your face blue, or *sangue blu* 'blue blood', used to

indicate aristocratic lineage (apparently, a very light complexion with blue veins clearly visible on one's wrists was considered as a sign of nobility), are also of metonymic origin.

Azzurro and blu, and to a much lesser extent *celeste* and *turchino*, also occur in different types of proper nouns: of sites (e.g., *Costa Azzurra* 'French Riviera, Fr. *Côte d'Azur', Grotta Azzurra* 'Blue Grotto'), persons (as a feminine name: *Azzurra*; as both feminine and masculine: *Celeste*), institutions (*Arma azzurra* is the name of the Italian air force), companies (*Blu* was a telecommunications operator), establishments (e.g., *Bar Trattoria Blu* in Milano, *Hotel Residence Azzurro* in L'Aquila, *Hotel Celeste* in Procida, *Sassi Turchini* – hostel in the Isola d'Elba), products (e.g., *Nastro Azzurro* 'lit. blue ribbon' is a beer, *ACE Denso Blu* is a washing powder, *Blu Diesel* is a type of fuel), means of transport (e.g., *Freccia azzurra* 'lit. blue arrow' trains), literary, musical and art works (e.g., *Celeste, azzurro e blu* – an album of songs by Gianni Morandi; *Nel blu dipinto di blu* (*Volare*) – a song by Domenico Modugno; in some cases, translations present variants with both *azzurro* and *blu*, for example *Bluebird* by Bukowski is rendered as *Uccellino azzurro* and *Il cavaliere blu*), etc.

Other terms of the BLUE area are formed by means of various morphological devices. In 3.1. – 3.3. we shall briefly illustrate the main word-formation patterns without dwelling on the possible differences regarding their combinatory possibilities.

3.1. Azzurro, blu, celeste and turchino as bases for derivation

The four terms we analyzed in the previous paragraph can be bases for the derivation of other colour adjectives (Grossmann / Mazzoni 1972, Grossmann 1988, Merlini Barbaresi 2004). The majority of derived adjectives belongs to the first of the following two types:

 derivatives formed by suffixation that denote an approximation – in terms of hue, brightness and saturation – to the focal point denoted by the base.
Lexicographic sources list a number of adjectives that denote shades that are approximately *azzurro* (*azzurrino* and *azzurrigno*, already attested in the 13th and 14th century respectively, *azzurrognolo*, *azzurrastro*, *azzurretto*, *azzurriccio*), *blu* (*bluastro*), *celeste* (*celestino*) and *turchino* (*turchinetto*, *turchiniccio*, *turchinaccio*, *turchinastro*). These terms with the sole exception of *azzurrino* and, to a lesser extent, *azzurrognolo* and *bluastro*, are rare or absent in the *la Repubblica* and *Diacoris* corpora. *Azzurrino* also denotes, by metonymy, young athletes of Italian national teams. One should mention that the selection of a specific approximative and/or evaluative suffix may depend on diatopic and diaphasic factors, as is the case with other types of adjectival bases in Italian;

2) derivatives with the elative suffix *-issimo* that denote the highest degree of brightness and saturation compared to an implicit standard. Featured in the corpora are: *azzurrissimo*, mainly referred to eyes, the sky and the sea, and the rare *celestissimo* and *turchinissimo*. Instances of *bluissimo* can only be found on the Internet (Googled on 10.04.2015). It should be noted that Italian can express intensification of a given quality also by means of the prefix *stra-*, which however is seldom known to modify colour terms. *Straazzurro* can only be found on the Internet, whereas *strablu* is a lexicalized form that denotes a kind of cheese.

Azzurro, blu, celeste and turchino can also be bases for the derivation of nouns and verbs. Derived verbs (cf. Timmermann 2002), formed by suffixation, parasynthesis or conversion, are mainly based on *azzurro*. These are (*in*)*azzurrare* 'to dye / to colour *azzurro*', also used in the pronominal form (*in*)*azzurrarsi* 'to turn *azzurro*', and *azzurreggiare* 'to be somewhat *azzurro*'. Lexicographic sources also list rare verbs such as *inturchinire* 'to dye / to colour *turchino*', *inturchinarsi* 'to turn *turchino*', *turchineggiare* 'to be somewhat *turchino*', while *blueggiare* 'to be somewhat *blu*' can only be found on the Internet. Internet also provides us with adjectives derived from the stative verbs in *-eggiare*, such as *azzurreggiante*, *blueggiante*, *turchineggiante*, that denote the state of being *azzurro*, *blu*, *turchino*. As for derived nouns, corpora are replete with quality nouns formed by conversion (*l'azzurro dei suoi occhi* 'the *azzurro* of his/her eyes', *il blu del cielo* 'the *blu* of the sky', *il turchino del mare* 'the *turchino* of the sea', etc.) and, less so, by suffixation (*azzurrità* 'the quality of being *azzurro*'). Other nouns derive from the aforementioned verb *azzurrare* 'to colour *azzurro*': these are *azzurramento* 'action/result of *azzurrar(si)*', *azzurraggio* and *azzurrante* 'blu(e)ing', technical terms that apply to colouring agents and related processes.

3.2. Azzurro, blu, celeste and turchino as constituents of compounds

A commonly used device for enlarging the inventory of colour terms is forming compound words made up of two adjectives or an adjective and a noun. These constructions, frequently nonce-formations in both literary and journalistic texts, confront scholars with the same problems as all other adjectival compounds in Italian, i.e. spelling, allomorphy, inflectional characteristics, etc. (cf. D'Achille / Grossmann 2009, 2010, Grossmann / Rainer 2009, and, with particular reference to colour compounds, Grossmann 1988, D'Achille / Grossmann 2013). When considering the relationship between the constituents, we have two groups: coordinate and subordinate compounds.

Among coordinate compounds we can further identify three subtypes which spread in usage from the 18th century onwards, with some isolated examples in earlier times:

1) constructions that qualify two- or multi-coloured entities such as flags, apparel, etc. (such as *drappi blu bianchi 'blu*-white cloths', *bandiere blu-bianco-rosse 'blu*-white-red flags'), or denote the colours of a team jersey (the so-called "club colours"), especially in football, and, by metonymy, the players, fans, managers, executives, etc. D'Achille's (2014) study on this kind of terms, based on CONI (Italian National Olympic Committee) documents dating from the 20th century (http://dlib.coninet.it) lists the following, among others: *biancazzurri* 'white *azzurro*' (later re-denominated *biancocelesti* 'white *celeste*') relating to the Lazio football team, *rossoblù* 'red *blu*' relating to Genoa, Cagliari and Bologna, *gialloblù* 'yellow *blu*' relating to Verona, Chievo and Parma. Notice that *turchino* does not appear in this kind of construction;

2) constructions indicating a hue that is intermediate between the colours denoted by the constituents (such as *occhi azzurro-grigi 'azzurro-grey* eyes', *capelli blu-neri 'blu-*black hair');

3) reduplicative constructions (more syntactic in nature) of the type *occhi azzurri azzurri 'azzurro azzurro* eyes', used for describing the presence of the colour at the highest degree of brightness and saturation, as is the case with the aforementioned derivatives in *-issimo* (cf. Rainer 1983).

The majority of compounds found in corpora are left-headed subordinate constructions. Most are documented since the 18th century, with the exception of sub-type 1), already attested in Old Italian. The first constituent is the hyperonym of the construction while the second constituent acts as modifier. These compounds describe a particular shade of the colour denoted by the head. Modifiers can be:

1) adjectives that refer to the degree of brightness and saturation of the colour (such as *azzurro-chiaro* 'light *azzurro'*, *blu intenso* 'intense *blu'*). These constructions are very frequent in the *la Repubblica* and *Diacoris* corpora and the array of adjectival modifiers is vast. Both *azzurro* and *blu* are found in combination with adjectives such as *acceso* 'bright', *brillante* 'shining', *chiaro* 'light', *cupo* 'dark', *elettrico* 'electric', *intenso* 'intense', *pallido* 'pale', *profondo* 'deep', *sbiadito* 'faded', *scuro* 'dark', *vivo* 'vivid'. Other adjectives such as *forte* 'strong', *spento* 'dull', *tenue* 'soft', modify *azzurro* but not *blu*, whereas *fiammante* 'flaming', *opaco* 'opaque', *slavato* 'faded', *squillante* 'shrill', occur with *blu* but not with *azzurro*. Some of these modifiers also occur with *celeste* and *turchino*;

2) a derivative of another colour adjective indicating a hue to which the colour denoted by the head comes close (such as *azzurro grigiastro* 'grayish *azzurro'*, *azzurro verdognolo* 'greenish *azzurro'*, *azzurro violaceo* 'purplish *azzurro'*; *blu verdastro* 'greenish *blu'*, *blu violaceo* 'purplish *blu'*; *celeste biancastro* 'whitish *celeste'*);

3) a noun (such as *blu notte* 'night *blu*') or a denominal adjective (such as *azzurro-smeraldino* 'emerald *azzurro*') that specifies the shade by virtue of a comparison with the quintessential colour attributed to its referent. Among *azzurro* or *blu* + N compounds in the *la Repubblica* and *Diacoris* corpora there is a vast array of nouns that can act as modifiers of the two adjectives (cf. Kristol 1978, Grossmann 1988: 182-199). There are nouns denoting metals/minerals, stones/jewels, colouring agents, flowers, fruits/vegetables, associated with the animal kingdom and a

number of others still. Nouns such as acciaio 'steel', carta da zucchero 'sugar paper', cielo 'sky', cobalto 'cobalt', ghiaccio 'ice', indaco 'indigo', mare 'sea', notte 'night', pervinca 'periwinkle', petrolio 'petroleum', occur in compounds with both azzurro and *blu* albeit with different frequency. The most frequent modifier for azzurro is cielo 'sky', while blu occurs frequently followed by notte 'night'. Other nouns such as acqua 'water', fiordaliso 'cornflower', glicine 'wisteria', lavanda 'lavender', polvere 'dust', etc. only occur with azzurro, others still, like asfalto 'asphalt', inchiostro 'ink', lavagna 'slate', melanzana 'aubergine', mirtillo 'bilberry', zaffiro 'sapphire', etc. only occur with blu. Also the remaining two terms, celeste and turchino, can be constituents of an A+N compound, but the types are fewer in number and their frequency is lower. Among the modifiers of *celeste* there are, for example, acqua 'water', ortensia 'hydrangea', polvere 'dust'. Turchino, on the other hand, can only be found in combination with pavone 'peacock'. While these types of compounds denote a shade of azzurro, blu, celeste and turchino that is typical for the referent of the noun, in other cases it is a colour of an object that is intimately associated with / typical of the referent (azzurro + forzista 'member/supporter of the Forza Italia party', blu + aviazione 'air force', etc.). The nominal constituent is generally a common noun, however there are also a few instances of names of persons (azzurro Tiepolo 'Tiepolo azzurro', blu Savoia 'Savoia blu', etc.) and institutions (azzurro Europa 'Europe azzurro', blu Nazioni Unite 'United Nations blu', etc.). Similar in nature, from the semantic point of view, are compounds made up of azzurro or blu and a denominal adjective such as azzurro ministeriale 'ministerial azzurro', blu berlusconiano 'Berlusconian blu'. The proliferation of A+N compound colour terms in the 20th century is mainly attributable to the fashion industry and to a number of crafts and businesses that kept introducing new hues into the market and giving them coined names that were subsequently disseminated by the mass-media. An interesting case in point is represented by the names coined for car body colours (cf. Caffarelli 2014). The apparently arbitrary selection of nominal modifiers can often be accounted for by the cultural salience of their referents in the Italian linguistic community, and in some cases is influenced by foreign models.

3.3. Nouns used as colour terms

The last device for creating colour terms, which we shall only briefly mention here since it is less relevant to our topic, is recourse to names of entities for denoting, by metonymy, a colour (an analysis of the morphological characteristics of this type of lexemes, that can be interpreted as the result of a conversion process, is given in Thornton 2004: 529-530). These are some of the nominal constituents of compounds listed in the previous paragraph, that can be used independently to denote a particular shade (such as *abito acquamarina* 'aquamarine dress', *stoffa indaco* 'indigo cloth'), as also other nouns that are generally used in the absence of *azzurro* or *blu* (such as *lago turchese* 'turquoise lake'). These terms are probably generated by ellipsis of phrases like: *un brillante colore di acquamarina* 'lit. a diamond of colour of aquamarine', *brillante color acquamarina* 'lit. aquamarine colour diamond', *brillante azzurro / blu acquamarina* 'lit. aquamarine *azzurro / blu* diamond', *occhi di acquamarina* 'lit. eyes of aquamarine'.

4. Conclusion

The existence of large and searchable corpora, unavailable at the time of Grossmann's studies on Italian colour terms (Grossmann 1988, Grossmann / Mazzoni 1972, 1976), as also the findings of the many studies published thereafter especially on the area of BLUE, make it now possible to fine-tune the observations outlined over 25 years ago.

Our analysis of the historical evolution and contemporary use of *azzurro*, *celeste*, *blu* and *turchino* in written Italian suggests that:

• *azzurro* and *blu*, the two terms that are now dominant in the area, meet the criteria that are usually required for being considered basic colour terms;

• *celeste*, which is analyzable from a morphological point of view and semantically transparent, cannot be considered as a basic colour term and is peripheral with respect to *azzurro* and *blu*;

• *turchino*, which is also analyzable from the morphological point of view but less transparent from a semantic point of view, was peripheral in previous historical periods and is nowadays in disuse;

• the history of the relationships among the four terms can be grouped in three broad periods: a) a first period (from the 14th to the 17th century) during which *azzurro* is the central term and *celeste* denotes light shades and *turchino* denotes dark shades; b) a second period (from the 18th century to the first half of the 20th century) during which *azzurro* remains the central term, *celeste* denotes light shades and *turchino* and *blu* denote dark shades; c) a third period (second half of the 20th century) during which *azzurro* still denotes a shade in-between *celeste* (light) and *blu* (dark), but gradually hands over the central term role to *blu* and comes closer to *celeste* inasmuch as it indicates only light shades;

• the huge increase in the use of *blu* during the 20th century can certainly be ascribed, at least in part, to the high number of calques (such as the aforementioned *caschi blu* 'Blue Helmet', *colletti blu* 'blue-collars', etc.) and loans (*blue-jeans, blue chip*, etc.) by contact with French, German and, above all, English that have a similar central term (Fr. *bleu*, Ger. *blau*, Eng. *blue*);

• the derivational potential of *blu* and *celeste* is more limited than that of *azzurro* and *turchino*; in compounding, the prevalence of *azzurro* and *blu* is very marked;

• the use with figurative meanings and the presence in idiomatic expressions is basically limited to *azzurro* and *blu*; the number of these contexts with *blu* is continually expanding also by virtue of calques from other languages.

Further material for studying the history of the semantic relationship among the four terms could be offered by research on specialized technical texts (such as treatises on painting, minerals, gems, etc.) in different historical periods and on both old and contemporary dialectal texts.

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