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## Marginal notes on the project for an etymological dictionary of the Mubi-Toram languages

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For Prof. H. Jungrauthmayr<sup>1</sup> on his 90th anniversary (7 May 2021)

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The paper accompanies the second part of a planned longer series “Mubi-Toram lexicon and Afro-Asiatic”<sup>2</sup> as a kind of belated extended introduction surveying some new results in the grouping of these languages as well as into some principles guiding our research designed to step by step reveal the Chadic and wider Afro-Asiatic cognate heritage in the lexical stock of the Mubi-Toram languages which represent the easternmost (26th) and *sprachgeschichtlich* perhaps the most enigmatic group of the vast Chadic (i.e., 6th) branch of the gigantic Afro-Asiatic family.

**Keywords:** Afro-Asiatic (Semitic-Hamitic) comparative linguistics, Chadic, etymology

<sup>1</sup> Who has influenced my research on these languages over the past two decades or so stronger than anybody else. Thus, among others, along with the pioneering Mubi records (“Wörterverzeichnis Mubi-Deutsch”) by J. Lukas (1937: 180-186), his sometime master from Hamburg, it was also H. Jungrauthmayr’s first Mubi-French dictionary (at that time just a manuscript from 1990, published only in 2013) that had a great impact on my choice to specially examine Mubi from an etymological standpoint at the turn of 1999/2000 in Frankfurt a/M during my Humboldt research fellowship in Chadic linguistics. This initial interest, however, has only turned into a research project in summer 2008 when, having in the meantime finished two parallel projects for a comparative Angas-Sura lexicon (March 2004) and EDE III (autumn 2007), I first started to work on comparing Mubi with the languages thought in the conventional classification of East Chadic by H. Jungrauthmayr (e.g., JS 1981 and 1994 etc.) to be its closest kindred, having no idea at all at that time on the brandnew field research results accumulating in the past couple of decades that have only been available online. This is how the first part of my “Mubi-Toram lexicon and Afro-Asiatic” (2009) was conceived.

<sup>2</sup> Elaborating *addenda* to the etymological entries with \*b-. A comprehensive preliminary report on the MT project is to follow later after a sufficiently considerable amount of etymological entries will have yielded further lexicostatistical scores for securely settling the position of the enigmatic languages in- or outside MT.

## Introduction to Mubi-Toram

Mubi-Toram (MT), as a Chadic language group, is the member of the immense Afro-Asiatic (AA) or Semito-Hamitic (SH) macrofamily comprising six equipotential branches: Semitic, Egyptian, Berber, Cushitic, Omotic, and Chadic. The classification of the languages supposed to belong to the MT group as well as their position in East Chadic in general, have been intensely researched over the past quarter of a century, whose results have ripened a significantly altered supposed scenario of the state-of-the-art towards the end of the past decade of the 2010s.

At any rate, MT is a group of the ECh. subbranch, that is, the easternmost group of all the Chadic languages in general also,<sup>3</sup> spread mostly in the western and central areas of the

<sup>3</sup> A comprehensive survey of classification theories about MT has been composed by J. Lovstrand (2012: 5-12, §2.1). The results of J. Lukas, founding father of Chadic comparative linguistics, were summed up in the chapter “The Languages of West Africa” by D. Westermann and M.A. Bryan (1952: 168) in “The Handbook of African Languages” which has identified only one single group, the so-called Jongor (Djongor) “dialect cluster” in the whole Abu Telfan area, where according to G. van Bulck (quoted in Jng. 1961: 95, fn. 1), there are “zwei Hauptdialekte, die sich voneinander beträchtlich unterscheiden sollen: den von Abu Telfan mit 8000-10000 Sprechern und den vom Jebel Geira (Mokolo) mit 6000 Sprechern”. The vision of Lukas was summed up by J. Lovstrand (2012: 6, §2.1.1, chart 1) as follows: Sokoro-Mubi super-group comprising Jongor (Migama), 'Bidyó (Bidiya, Waana), Dangaleat (Dangla), Mogum-Koffa, Mubi (Mubi, Masmaje, Kajakse, Birgit, Toram), Sokoro (Sokoro, Barain, Saba). The Chadic branch was divided up by J.H. Greenberg (1963: 46) into 9 groups, where the last one corresponds basically to ECh., whose last sub-group consists of Mubi, Karbo (Dangla). That was all, although the scheme by J. Lovstrand (2012: 7, §2.1.2, chart 2) quoting this work added here Jegu (Mogum), Jonkor (Migama), Wadai-Birgid (Birgit), i.e., sort of a further mixture of DM + MT. Following Greenberg, P. Newman and R. Ma (1966: 231, table II) classified Jegu, Mubi, Sokoro, Somrai and Tuburi together (!) in subgroup 9 of Plateau-Sahel. C. Hoffmann (1971) supported the 2 sub-branches model as well as its division by P. Newman and R. Ma (1966), which he only slightly modified, e.g., “Kajakse and Masmaje are considered languages, not dialects of Mubi”, and so the last (6th) ECh. super-group comprised Mubi, Kajakse, Masmaje, Barein, Dangla, Karbo, Jegu (Mogum), Jonkor (Migama), Birgit, Bidiya (Lovstrand 2012: 7-8, §2.1.3, chart 3). Finally, H. Jungrathmayr (Caprile & Jng. 1973 and Jng. 1981: 12-16) was the first to split up this super-group in two: DM vs. MT (Birgit, Masmaje, Mogum = Jegu, Mubi, Kajakse, Toram), from where he shifted Bidiya into DM in 1973. P. Newman (1977 and p.c. from 1979 referred to in Bender & Doornbos 1983: 76, §3.5.7) assumed already 4 Ch. sub-branches, one of which is ECh. where he classified already Birgit, Kajakse, Kujarke, Masmaje, Minjile, Mubi, Toram as “members of Mubi, sub-branch EST-A3 of the East Branch (sic) of Chadic”. DM and MT were figured as tightly close units. The MT group was numbered by H. Jungrathmayr and K. Shimizu (1981: 16) as the 27th (and last) Chadic group (following Mokilko alone treated there as a distinct group on its own separate from DM) where Jegu, Birgit, Mubi were listed, whereas H. Jungrathmayr and D. Ibrizimow (1994 I: XV) listed Jegu, Birgit, Mubi and Kofa in MT making a group (then no. 26 Mokilko being joined to DM). In the classification, based by R.M. Blench (2006 MS) and the Ethnologue<sub>16</sub> (Lewis 2009) on Newman (1977), within III. ECh. B, 3 units (B1-3) are distinguished: B1 is further divided into DM (Bidiya, Dangla, Jonkor Bourmataguil, Mabire, Migama, Mogum/Jegu) and MT (Birgit, Kajakse, Masmaje, Mubi, Toram, Zirenkel), while B2 = Mokilko and B3 = Sokoro group. M. Marti, C. Mbernodji, K. Wolf (2007: 6) listed 5 languages in the MT group: Birgit, Kajakse, Masmaje (Masje), Mubi and Toram. Having moved a number of languages from MT into DM, this model of Ethnologue<sub>16</sub> (Lewis 2009) was otherwise almost the outcome of the research by J. Lovstrand (2012: 21, §3.7, chart 8) classified both DM (Bidiya, Birgit, Dangla, Jonkor Bourmataguil, Mabire, Migama, Mogum/Jegu, Toram) and MT (Kajakse, Masmaje, Mubi, Zirenkel) within a closer unity of three distinct “ECh. B1” groups: DM, MT and Kujarke. Within his “III. ECh. B”, P. Newman (2013: 5) distinguishes 4 groups, one of them is B.1 Dangla-Mubi group where he lists 3 units: a. DM (Dangla/Dangaléat, Bidiya, Birgit, Bourmataguil, Migama, Mogum, Toram), b. MT (Mubi, Kajakse, Masmaje, Zirenkel), c. Kujarge. C. Peust (2018) only examined selected ECh. languages to

Republic of Chad. When my first etymological pilot study of the MT lexicon (Takács 2009) was written, I had basically been only working with a handful of languages (usually with but one source for each)<sup>4</sup> being aware of and satisfied with the conventional grouping of the language usually grouped as one in MT (cf., e.g., JS 1981; JI 1994) as the priority then lied for me in how “to integrate this remote lexical stock in its wider Chadic and Afro-Asiatic context” (Takács 2009: 315). More than an entire decade having passed, I am trying now to give below a sketchy up-to-date survey of the problems pertaining to the languages affected in my project.

In the light of the recent field research in the past couple of decades, we may perhaps in the first step restrict the circle to those languages that are certainly to be considered as members of the MT group. This is consisting at the moment minimally of the following languages (in alphabetic order), some of which have become known only recently: Birgit,<sup>5</sup> Duguri,<sup>6</sup> Jegu,<sup>7</sup> Kaja/ekse,<sup>8</sup> Karakir,<sup>9</sup> Kofa,<sup>10</sup> Kujarke,<sup>11</sup> Masmaje,<sup>12</sup> Mogum,<sup>13</sup> Mubi<sup>14</sup> (spoken by the Monjul, fem. Minjile),<sup>15</sup> Musunye,<sup>16</sup> Toram,<sup>17</sup> Zirenkel.<sup>18</sup>

elaborate his unrooted tree model, where Mubi and Kajakse considered to be “the first branch-off within this group and therefore have the same stemmatic weight as all the other East Chadic B languages taken together.” Within her “III. ECh. B”, O.V. Stolbova (CLD VI 26) classified 5a DM (East Dangaleat, West Dangaleat, Central Dangaleat, Migama, Bidiya, Mabire) vs. 5b MT (Mubi, Zirenkel, Masmaje, Kajakse, Toram, Birgit, Jegu) tightly close to one another. classified within her “III. ECh. B”.

<sup>4</sup> Birgit (Jng. 1973 MS and 2004), Jegu (Jng. 1961), Kofa-Mogum (Jng. 1977 MS), Masmaje (Alio 2004), Kajakse (Bender-Doornbos 1983, Alio 2004), Kujarke (Bender-Doornbos 1983), Masmaje (Alio 2004), Mubi (Lukas 1937, Bender-Doornbos 1983 as both Minjile and Mubi; Jng. 1990 MS), Toram (Alio 1988 MS; 2004).

<sup>5</sup> J. Roberts’ (1993: 23, §5) field research stated 4 Birgit dialects: Abgué, Eastern Birgit, Duguri, Agrab where “Status of Duguri is still somewhat uncertain”. MMW 2007: 13-14, §5.3.: “La variété ‘abgué’, parlée à Abgué, Medgir et Arâka ..., diffère dans le vocabulaire et la prononciation de la variété Agrab, selon nos interlocuteurs à Abgué et à Agrab. La variété ‘birguit est’, parlée à Arbochi, Tiléguey et autres villages dans la Sous-Préfecture de Magrane, est proche de la variété Abgué. Les gens d’Abgué disent que c’est la même chose tandis que les gens de Tiléguey ne savent que parler lentement avec les gens d’Abgué. La variété ‘agrab’, parlée à Agrab, Al Mindar et Dar-al-Ech ... est la même chose que le ‘duguri’ ...” MMW 2007: 16-17, §6.7.2.: “La vitalité du birguit est la plus forte à Abgué, le centre des Birguit. Bien qu’on remarque que l’arabe devienne plus dominant dans la nouvelle génération, les interlocuteurs disent que le birguit va continuer à être parlé dans l’avenir”.

<sup>6</sup> J. Roberts (1993: 22, §3.13.): “... the Toram at Lui ... recognized that the speech of the Duguri was something like their own. ... It seems that the Duguri are claimed to be a fraction of the Birgit people ... The Birgit at Agrab said they could understand and speak Duguri; intercomprehension is 100%, they claimed. ... At Agrab, the people said the two languages were the same, but simply that certain words were different, Duguri is evidently similar to Toram, as stated by the people at Lui. ... At Abgué, the people can understand Duguri sometimes, but not everything.” MMW 2007: 13-14, §5.3.: “La situation de la variété ‘duguri’, parlée à Dar-Al-Ech (et Al-Mindar?), n’est pas encore clarifiée. Selon les locuteurs d’Abgué il y a une (petite) différence avec leur parler. Selon les gens d’Agrab, la variété ‘duguri’ et ‘agrab’ sont la même chose.” MMW 2007: 16, §5.7.1.: “Si la variété ‘duguri’ est une variété à part ou identique à la variante ‘agrab’, cela reste à vérifier. Le pourcentage de la similitude lexicale moyennant 62,3% ou 73,5% ne montre pas encore s’il y a intelligibilité inhérente entre les variétés birguits.”

<sup>7</sup> The informant of J. Lukas in 1933, as we learn from H. Jungrathmayr (1961: 96, §2), considered Jegu as member of the Jonkor cluster. The informant of H. Jungrathmayr (1961: 96-97, §4) placed in 1959 Jegu “südlich von Mongo in der Republik Tschad ... von den folgenden Stämmen bzw. Dialekten oder Sprachen umgeben: im Norden von den Oobe, Tunkul<sup>9</sup>), Mirincol und Zarle, im Osten von den Orme und Mawa, im Südosten von den Gora und Jon, im Südwesten von den Boce und Gomo und im Westen von den Dabra<sup>9</sup>) und Bigir.” J. Roberts (1993: 23, §5.) treated “Jegu (Mogum)” (sic) as one, whose “Dialects: JEGU, MOGUM-

-DELE, MOGUM-URMI, (MOGUM-GURUNTIYE?,) KOFA. ...” Throughout his 1993 paper, Roberts was speaking of the “Jegu dialect of Mogum”.

<sup>8</sup> P. Doornbos and M.L. Bender (1983: 59, §3.4.12 pace Le Rouveau 1962: 129-130) offered a brief description of the whereabouts (location, villages, neighbours) and circumstances (number of speakers) of the Kajakse, which was extended with more recent details by MMW (2007: 5, §1.1.2.: population, 8, §1.4.2.: alphabetization, 17-18, §6.1-2.: geographical position, 18, §6.3.: dialects, 19-20, §6.5.: language vitality, 20-21, §6.6.: sociolinguistic attitude). MMW 2007: 21, §6.7.1.: “La langue kadjakse semble assez homogène. Les gens se comprennent même s’il y a quelques différences de vocabulaire et de vitesse de parler entre les différentes régions.”

<sup>9</sup> Karakir (dialects of Dougne, Musunye, Al Faresh, Bilayo), whose name literally mean “cave-dweller”, while others call the language as Jonkor-Bourmataguil which was considered by D. Barreteau & P. Newman (1978) as an alternative name of Mogum-Jegu. But as we learn from J. Lovstrand (2012: 10, fn. 11), “this claim, for which no support is given, undoubtedly arises from the use of the derogatory term “Jonkor” (meaning “heathen”) to refer to several different language groups including Migaama and Mogum (Roberts 1993). James Roberts did field research to confirm that Jungraithmayr was correct in labeling Jonkor Bourmataguil a separate language.” To the best of my knowledge, this people and language have not yet been thoroughly described. Only indirect information is available from the research by J. Roberts (1993: 7, §3.5.1.), who reports of “the Karakir and their language. They themselves called their language [dúɲ], and called their ethnic group by the same name. There is a village by that name about 15 km from Bilayo (which I will henceforth refer to as Dougne), but ... the group was probably much larger in former times ... and Dougne was apparently one of the historic Karakir villages.” Roberts (1993: 8-9, §3.5.2.) “It is not certain that Karakir was a completely homogeneous language, since it was spoken over a relatively wide area. ... Today, the Bilayo people said that the language spoken at Dougne and Al Faresh was the closest to their own speech variety, and that these other two villages spoke ‘almost the same’: Dougne and Al Faresh (and Bilayo) can understand each other, they assured us. I suspect that there is some dialectal variation among these three ...” J. Roberts (1993: 22, §5.) concluded on the “Karakir (Jonkor of Bourmataguil, Dougne) ... Dialects: DOUGNE, MUSUNYE. I tentatively suggest that Karakir be listed separately because it has been traditionally regarded as a distinct group.”

<sup>10</sup> J. Roberts (1993: 23, §5.): Kofa is a dialect of Jegu (Mogum) and “Kofa is a little more distant from the other dialects, but is not clear if it deserves to be listed as a separate language.” The interview made in Mongo with the Kofa by J. Roberts (1993: 14, §3.9.2.) has brought forth the following situation: “The Kofa men identified several neighboring ethnic groups and languages. To the east of Kofa country are the Bidiyo, and also the Karakir (although they said these people are no longer there); to the northwest are the Ubi; to the west the Jegu; to the southwest the Mogum; to the south the Bolgo; and to the southeast, the Musunye.”

<sup>11</sup> P. Doornbos and M.L. Bender (1983: 59-60, §3.4.13) supplied precious data on the Kujarke people. M.L. Bender’s (in: Bender & Doornbos 1983: 76, §3.5.7) “quick survey” showed Mubi, Minjile and Kajakse to belong tightly together (their lexicostatistical scores ranging between 74-92%), but they only have about a quarter thereof in common with Kujarke, which led Bender to exclude Kujarke from MT. Two decades later, precious, albeit alarming, insights by P. Doornbos (2015: 94-95) have been published on the whereabouts of the Kujarke as an endangered people and language. R.M. Blench (2008 MS: 2): “Recently, an unpublished manuscript containing additional words collected by Doornbos has been circulated, together with some etymological commentary. Nonetheless, the sample material remains small and the transcription and reliability of some forms can be questioned. ... The fate of the Kujarke people, whose homeland is exactly in the centre of recent conflict, is unknown, but prognostications cannot be good.” J. Lovstrand (2012: 19, §3.5): “Though geographically isolated from other Chadic languages, Kujarke has been described as a Chadic language since its earliest documentation (Doornbos and Bender 1983:59, 76). The people are described as “Chadic speakers” who may have very well been taken as slaves from the western boundary of the Daju sultanate, viz., the Guéra region. An unpublished list of two hundred Kujarke words from the field notes of Paul Doornbos has recently been circulated among linguists.” V. Blažek (2015: 88, Appendix 1) devoted one page to “The fate of Kujarke after 1981”, an abhorring chain of ethnic massacres permanently threatening this people.

<sup>12</sup> Brief report on the Masmaje with information on the villages, classification, phonology, morphology and a wordlist in Alio 2004: 277-285, §IV). MMW 2007: 5, §1.1.3.: geo- and demography, 6-7, §1.3. and 8, §1.4.3.: social infrastructure, economy, religion, villages, 22-26, §7: ethnical and sociolinguistical info with the outcome confirming that “La langue masmedje semble homogène. ...”

The considerable progress in the field research on the MT languages has brought forth considerable new results that make me reflect on drawing the following provisoric outlines in their inner grouping:

**1. Muboid sub-group.** That Mubi-Minjile (treated as two dialects) are tightly close to Kajakse was already clear to M.L. Bender in 1983.<sup>19</sup> The high degree of Mubi-Masmaje<sup>20</sup> and Kajakse-Masmaje<sup>21</sup> relationship was recorded in 2007. Mubi, Kajakse and Masmaje, whose interrelationship was estimated in MMW (2007: 10) on the basis of a lexicostatistical comparison of their wordlists mounting to 227 items, stand especially close to one an-

<sup>13</sup> When D. Barreteau (1978) classified the Chadic languages, he grouped Mogum (including Jegu) with the Dangla-Migama languages, viz. Dangla, Migama, Mawa, Bidiya. The Mogum people at Bodom interviewed by J. Roberts (1993: 10-11, §3.7.) corroborated the closest ties with the Jegu and then the Kofa.

<sup>14</sup> The most comprehensive description of Mubi has been delivered by H. Jungrathmayr (2013), which is at a time the only monographical elaboration of a MT group language at all for the time being. Barreteau (1978) classified Mubi as a subgroup of the Dangla-Migama group. Following his assumption, C. Mberodji & E. Johnson (2006: 7, §4.1.) compared the lexicons of Mubi and of the Dangla dialects as well as of Zirenkel with a little surprising result: "Selon les Moubi qui ont répondu aux questionnaires individuels, la seule langue avec laquelle le moubi a de ressemblances est le zirenkel ..."

<sup>15</sup> Minjile is treated in Bender & Doornbos 1983, as a distinct idiom beside Mubi. Still, M.L. Bender (in: Bender & Doornbos 1983: 76, §3.5.7) also admitted: "I am assuming Minjile is a dialect of Mubi ...", since his "quick survey shows Mubi and Minjile to be one language (76/82 or 92% in common). Both Mubi and Minjile seem to be dialectally related to Kajakse ... as indicated by Lukas 1937."

<sup>16</sup> To the best of my knowledge, this people and language have not yet been described. Only indirect information is available from the research by J. Roberts (1993: 17-18, §3.11.2.) confirming that Musunye is as close to Toram as Jegu to Mogum. From his couple of informants, J. Roberts (1993: 9-10, §3.6.) shared some scattered and second-hand information on the Musunye language alleged to (have) be(en) spoken in several villages. One of his informants knowing "a lot about the Musunye and their history ... said that it was incomprehensible with Toram and with Dougne (Karakir), although he didn't speak any of the Musunye language himself. It is only the elderly people who still speak the Musunye language, ... the young people have abandoned it altogether."

<sup>17</sup> The disappointingly brief and incomplete interview by J. Roberts (1993: 17-18, §3.11.2.) with the Toram in their home area has brought forth the names of their villages and neighbors that they "named Burgit, Duguri, Musunye, Mogum, and Jegu as neighboring languages that they considered similar.... Of these they said that Mogum and Jegu were the easiest to understand."

<sup>18</sup> Kh. Alio (1998), probably the first linguist to deal with Zirenkel, etymologized this ethnonym from the Dadjo term for "stranger", "qui a fini par désigner une sorte de langue 'mixte', formé par le dadjo, le dangaléat, et le moubi". He assumed the Mubi influence to be due to the fact that the Mubi settled with the Dadjo for having had conflict with them. Such a linguistic interference between Dadjo and Zirenkel and Zirenkel as a *Mischsprache* (???) were, however, not perceived by E. Johnson (2005: 7) "malgré le fait que les villages zirenkel se trouve(nt) dans le canton Dadjo". On the contrary: "le zirenkel nous semble clairement une langue tchadique, la plus rapprochée du mubi." Speaking of "zirenkel, une langue inconnue auparavant aux linguistes au Tchad", C. Mberodji & E. Johnson (2006: 7, §4.1.) reported that "les Moubi nous ont signalé, que les Zirenkel sont descendants des Moubi qui ont quitté la région de Mangalmé à une époque lointaine pour s'installer au pays Dadjo près de la ville de Mongo." ... Comme beaucoup de Zirenkel nous ont dits (sic) qu'ils comprennent le dangaléat, nous avons également recueilli des listes de mots dans trois dialectes du dangaléat."

<sup>19</sup> M.L. Bender's "quick survey" (in Doornbos-Bender 1983: 76, §3.5.7) showed that "both Mubi and Minjile seem to be dialectally related to Kajakse (64/81 or 79% and 63/85 or 74% respectively) ..." MMW 2007: 10, §4: Mubi vs. Kajakse lexical share rated at 63,4% (±8,2%).

<sup>20</sup> MMW 2007: 10, §4: Mubi vs. Masmaje lexical share rated at 69,2% (±7,9%). MMW 2007: 21, §6.7.1.: "La similitude lexicale est de 60,2-76% avec le masmedje et de 55,2-71,6% avec le moubi."

<sup>21</sup> MMW 2007: 18-19, §6.4.: "Selon les interviews communautaires parmi les Kadjakse il y a une intercompréhension avec le masmedje ... et une ressemblance des mots avec le moubi ..."

other (with lexicostatistical scores of similarity ranging between 63-69%).<sup>22</sup> Their mutual intercomprehension is also by far closer than with any other language in the region.<sup>23</sup> The enigmatic and lesser-studied Zirenkel appears also tightly connected with Mubi<sup>24</sup> whose speakers also admitted their close relationship.<sup>25</sup> This Muboid unity may be opposed against the mutually equally coherent Birgit dialect cluster<sup>26</sup> showing only 34-45% of lexi-

<sup>22</sup> MMW 2007: 10, §4: Masmaje vs. Mubi: 69,2% ( $\pm 7.9\%$ ), Kajakse vs. Mubi: 63,4% ( $\pm 8.2\%$ ), Kajakse vs. Masmaje: 68,1% ( $\pm 7.9\%$ ). MMW 2007: 21, §6.7.1. on the Kajakse: "Il y a une certaine intercompréhension avec le masmedje et le moubi. La similitude lexicale est de 60,2-76% avec le masmedje et de 55,2-71,6% avec le moubi." MMW 2007: 25, §7.7.1. too: "Il y a une certaine intercompréhension avec le kadjakse et le moubi. La similitude lexicale est de 60,2-76% avec le kadjakse et de 61,3-76,9% avec le moubi."

<sup>23</sup> MMW 2007: 21, §6.7.1. on the Kajakse: "Il y a une certaine intercompréhension avec le masmedje et le moubi." Still, their intelligibility is weak according to MMW 2007: 16, §5.7.1.: "En ce qui concerne l'intercompréhension avec ... le masmedje, kadjakse et le mubi, il n'y a pas d'intelligibilité inhérente et la communication se fait en arabe local." MMW 2007: 18-19, §6.4.: "Selon ... les Kadjakse il y a une intercompréhension avec le masmedje ... et une ressemblance des mots avec le moubi ... Pour la communication avec les Masmedje ils semblent préférer quand même l'arabe local. Seuls les hommes d'Alili mentionnent la possibilité que les Kadjakse et les Masmedje puissent parler chacun son patois et ils se comprennent." MMW 2007: 23, §7.4.: "Il semble qu'il y a une intercompréhension entre le masmedje et le kadjakse. Selon les hommes d'Assafik et d'Amlaména Hilélé c'est la même langue. Les hommes d'Assafik disent qu'un enfant comprend les Kadjakse, parce que cette langue est comme la langue maternelle de l'enfant. ... Les hommes de tous les deux villages masmedje disent comprendre au moins un peu les Moubi ... il s'agit plutôt d'une compréhension acquise que d'une intelligibilité inhérente."

<sup>24</sup> Although Kh. Alio (1998), probably the first linguist to deal with Zirenkel, was still speculating about "une sorte de langue 'mixte', formé par le dajjo, le dangaléat, et le moubi". But E. Johnson (2005: 7) found Zirenkel as a Chadic language "la plus rapprochée du mubi" among all the Chadic languages, which was evidenced lexicostatistically: the degree of similarity of Zirenkel with the Mubi basic lexicon mounted to 71% ( $\pm 5.0\%$ ), while that with the Dangla dialects merely to the half of this degree: 34% ( $\pm 6.5\%$ ) with EDangla, 36% ( $\pm 6.6\%$ ) with CDangla, and to 35% ( $\pm 6.6\%$ ) with WDangla according to the scores by Johnson (2005: 8), whose interviews conformed that "bien que le moubi soit sans doute la langue la plus rapprochée au zirenkel sur le plan linguistique, ... les Zirenkel ne possèdent pas une compréhension suffisante du Mubi pour pouvoir bénéficier des matériels écrits en mubi." C. Mbernodji & E. Johnson (2006: 7, §4.1.) repeated similar lexicostatistical scores of the lexical similarity of Mubi with Zirenkel: 71% ( $\pm 5.0\%$ ), 32% ( $\pm 6.4\%$ ) with EDangla, 35% ( $\pm 6.6\%$ ) with CDangla, 35% ( $\pm 6.6\%$ ) with WDangla. Lexicostatistical analysis by J. Lovestrand (2012: 17, §3.2., table 3) resulted in the following percentage of phonologically similar words shared by Zirenkel with: Mubi 66%, Kajakse 53%, Masmaje 51%, Birgit-Abgué 37%, Jegu of Mogum 35%, Toram 31%, EDangla 38%, Tunkul of Bidiya 33%, Migama-Baro 38%, Mabire 27%, Ubi 26% etc.

<sup>25</sup> The Mubi themselves claimed in the questionnaire of C. Mbernodji & E. Johnson (2006: 7, §4.1.) that in comparison with the DM languages, "la seule langue avec laquelle le moubi a de ressemblances est le zirenkel ..." Similarly, C. Mbernodji & E. Johnson (2006: 10, §8.) stated: "Selon les impressions des Moubi interviewés, leur langue n'a pas de ressemblance avec le masmadjé, le kadjaksé ou le dangaléat. Ils reconnaissent seulement un peu de ressemblance avec le zirenkel." They, however, showed a lower degree of intercomprehension. Their test was negative even about the mutual intelligibility of both these closest languages: "les Zirenkel ne possèdent pas une compréhension suffisante de moubi quand bien même ces deux langues sont les plus rapprochées l'une de l'autre sur le plan linguistique. Il est clair que le zirenkel est une langue à part entière de moubi et par conséquent ne peut être considéré comme un dialecte de moubi." As a result of their research, O.V. Stolbova (CLD VI 26, III. ECh. B, 5b) classified Zirenkel in MT.

<sup>26</sup> MMW 2007: 10, §4: Birgit-Agrab vs. Birgit-Abgué: 73,5% ( $\pm 7.5\%$ ), EBirgit vs. Birgit-Abgué: 62,3% ( $\pm 7.5\%$ ), EBirgit vs. Birgit-Agrab: 62,3% ( $\pm 7.6\%$ ).

costatistical similarity with Muboid according to MMW 2007,<sup>27</sup> whose field research with these peoples has corroborated the same about their intelligibility.<sup>28</sup>

**2. Jegoid sub-group.** Jegu and Kofa may be varieties of the same language<sup>29</sup> and, along with Mogum, they are all tightly related to Toram,<sup>30</sup> Musunye<sup>31</sup> and so also to its closest neighbouring kindred,<sup>32</sup> the Karakir dialect cluster (of Bilayo, Dougne, Al Faresh,

<sup>27</sup> MMW 2007: 10, §4: Kajakse vs. Birgit-Abgué: 38,5% (±8.3%), Kajakse vs. Birgit-Agrab: 34,5% (±8.1%), Kajakse vs. EBirgit: 34,7% (±6.0%), Masmaje vs. Birgit-Abgué: 38,7% (±8.2%), Masmaje vs. Birgit-Agrab: 36,1% (±8.2%), Masmaje vs. EBirgit: 36,7% (±6.2%), Mubi vs. Birgit-Abgué: 44,9% (±8.4%), Mubi vs. Birgit-Agrab: 38,3% (±8.2%), Mubi vs. EBirgit: 36,7% (±6.2%). MMW 2007: 25, §7.1.1: “Il n’y a pas d’intercompréhension avec les variétés birguits, la similitude lexicale est très basse (27,9-46,9%) et la communication se fait probablement en arabe locale.”

<sup>28</sup> MMW 2007: 10: “Il n’y a pas d’intelligibilité entre le moubi et les trois variétés birguit, entre le masmedje et les trois variétés birguit et non plus entre le kadjakse et les trois variétés birguit.” MMW 2007: 25, §5.7.1: “En ce qui concerne l’intercompréhension avec les autres variétés du groupe tchadique est B1.2, à savoir le masmedje, kadjakse et moubi, il n’y a pas d’intelligibilité inhérente et la communication se fait en arabe local.” MMW 2007: 21, §6.7.1: “Il y a une certaine intercompréhension avec le masmedje et le moubi. La similitude lexicale est de 60,2-76% avec le masmedje et de 55,2-71,6% avec le moubi. ... Pourtant la communication avec les Masmedje et les Moubi se fait normalement en arabe local.” MMW 2007: 25, §7.7.1: “Il y a une certaine intercompréhension avec le kadjakse et le moubi. La similitude lexicale est de 60,2-76% avec le kadjakse et de 61,3-76,9% avec le moubi. ... Pourtant la communication avec les masmedje (sic) et le moubi (sic) se fait normalement en arabe local. Il n’y a pas d’intercompréhension avec les variétés birguits, la similitude lexicale est très basse (27,9-46,9%) ...”

<sup>29</sup> The field research at Mongo conducted by J. Roberts (1993: 11, §3.8.2.) with two Jegu persons confirmed that they regard Kofa as “the same language”. As for Kofa, “there was a greater difference ... the Kofa person can speak at normal speed and be understood, however. And a Jegu child would have to reach the age of 12 before understanding the Kofa variety.” J. Roberts (1993: 23, §5.): “There seems to be a large degree of cohesion between all of the Jegu, Mogum, and Kofa. Indications are positive for translation ..., possibly centered around the Jegu dialect.”

<sup>30</sup> The field research conducted by J. Roberts (1993: 11, §3.8.2.) at Mongo with two Jegu persons shows that “The Jegu adults of Boy ... could not understand Saba, Mahwa, or Ubi. ... The Toram ... could speak Mogum, and so they can understand each other.” The disappointingly brief and incomplete interview by J. Roberts (1993: 17-18, §3.11.2.) with the Toram in their home area has shown that “they specifically rejected our suggestion of a similarity with Kofa or Mubi.” For them, “Mogum and Jegu were the easiest to understand. ... A Toram adult would understand a Mogum or Jegu immediately; each would speak his own language, and the two would understand each other. Musunye seemed to be at about the same level of difference from Toram. One gentleman estimated that a Toram could understand about 50% of Mogum, Jegu, and Musunye.” V. Blažek (2011: 42, §3, note to scheme 2) too arrived at the same conclusion: “Toram is closer to Jegu (65.1%) than to Mubi (51.2%). The relatively low figures are caused by very poor Toram lexical data, ca. 40 items from the basic 100-word-list.” Surprisingly, J. Lovstrand (2012: 17, §3.2) supposes that “two languages in the B1 group, Toram and Birgit, might be currently classified in the wrong subgroup”, which means put in other words that both should be moved into the DM “sub-group” from the MT one.

<sup>31</sup> As for the Musunye language, another informant of J. Roberts (1993: 9-10, §3.6.) “felt that it was most like the Jegu-Mogum-Kofa complex. The Kofa people interviewed at Mongo said that the Kofa could understand Musunye. ... The Jegu man interviewed at Mongo ... claimed that the Mogum, Jegu, and Musunye shared a common origin, and that the ancestor of the Musunye was simply a Mogum. ... the Jegu children of Boy could understand Musunye from the age of 6-7 years old; their language is very close to Jegu. Finally, the Toram people at Lui said that the Musunye resembled Toram, perhaps 50% comprehensible with it.”

<sup>32</sup> J. Roberts (1993: 8-9, §3.5.2.): “After the Karakir varieties, the Bilayo people said that Musunye was the language that was next closest to their own. The Dougne people understand Musunye; there are nuances in certain names for things, but otherwise they are alike, was the comment heard at Bilayo. ... a Musunye and a Dougne ...

Musunye).<sup>33</sup> There is an assumption that the Jegu-Toram-Birgit cluster does not at all belong that tightly together with Muboid cluster, but rather with DM.<sup>34</sup> J. Roberts' 1993 field research has shown Kofa to be the closest to Mabire, then Mogum, then Jegu,<sup>35</sup> and that Mogum is closely related with Kofa.<sup>36</sup> This Jegoid unity (Jegu, Kofa, Mogum, Toram, Karakir, Musunye) appears to be much more distant from Birgit and Duguri.<sup>37</sup>

**3. Birgit dialect cluster.** The Birgit dialects are themselves pretty diversified,<sup>38</sup> and there is a doubt as to its classification within MT along with Jegu and Toram with which it may be closer to one another attached than to Muboid.<sup>39</sup> V. Blažek (2008: 135) demonstrated lexi-

would understand each other ..." Similarly, J. Roberts (1993: 9-10, §3.6.): "The Karakir people at Bilayo ... identified Musunye as the closest language to Karakir, the two being intercomprehensible."

<sup>33</sup> J. Roberts (1993: 8-9, §3.5.2.): "The language that was next closest to Karakir was identified as Toram. The Bilayo men said they could understand Toram, but admitted ... differences. ... The next closest language identified by the Karakir was Mogum-Jegu-Kofa. They found these three to be all together almost on a par, but when pressed, they said Mogum might be a bit easier to understand than the other two. They said that they could understand some Kofa words, but far from everything. If a Karakir were to meet a Mogum, the two would have to converse in Arabic in order to understand each other. The allowed, however, if the two individuals knew each other, they might each understand the other's speech if they paid very careful attention." Elsewhere, J. Roberts (1993: 9-10, §3.6.) states that "the Karakir people at Bilayo ... identified Musunye as the closest language to Karakir, the two being intercomprehensible."

<sup>34</sup> J. Lovstrand (2012: 17, §3.2) supposes that "two languages in the B1 group, Toram and Birgit, might be currently classified in the wrong subgroup", which means put in other words that both should be moved into the DM "sub-group" from the MT one. His scheme (*ibid.*, table 3: percentage of phonologically similar words) shows Jegu scores also much closer to the DM core languages than to MT.

<sup>35</sup> The interview with the Kofa men made by J. Roberts (1993: 14, §3.9.2.) in Mongo has revealed that "When asked about neighboring languages, they actually mentioned Mabiré first. Although the Kofa cannot understand the Mabiré language ..., they consider the Mabiré to be Kofa people, and the Mabiré at Katch now speak Kofa, apparently. Linguistically, the Kofa reckoned that Mogum was the closest to their own speech variety (perhaps Mogum-Délé first, then Mogum-Urmi?). Then came Jegu, followed by Musunye ... understood by the Kofa."

<sup>36</sup> The Mogum at Bodom interviewed by J. Roberts (1993: 10-11, §3.7.) "reckoned that the Jegu spoke Mogum 'with a different accent'. Kofa ... was a little further away from their speech variety, having both a different accent and some words different as well. The people at Bodom considered the Mogum to be the same people together with the Jegu and Kofa. However, they said that the Jegu speech variety was closest ('beaucoup rapproché') to their own. ... among the Kofa-Jegu-Mogum group, the overall center would be Jegu. As for the intercomprehension with Kofa, little problems were envisaged. They said a Kofa person could understand and speak with Mogum with no difficulty, each one speaking his own variety of the language. Even a child ... could understand Kofa as soon as he could speak Mogum, and the children would understand each other among themselves. Saba, the neighboring language to the west, is further away linguistically. The people of Bodom rated it more difficult to understand than Kofa ..."

<sup>37</sup> The interview by J. Roberts (1993: 17-18, §3.11.2.) with the Toram in their home area confirmed that "... Birgit is evidently further distant. A Toram can understand only some words of Birgit. ... Duguri must have a similar status to Birgit."

<sup>38</sup> J. Roberts (1993: 20, §3.12.3.): "... the Birgit mean at Abou Deïa mentioned the Birgit of Am Dam sous-préfecture in first place, then Duguri (Dar-el-esh), and thirdly Agrab. No other languages were mentioned as similar. The villagers at Agrab said that they understood a little of Toram, but well less than half, and that they understood no other languages in the area." MMW 2007: 16, §5.7.1.: "Surtout la similitude lexicale entre 'birguit est' et les variétés àbgué' et 'agrab' est assez basse."

<sup>39</sup> Surprisingly, J. Lovstrand (2012: 17, §3.2) supposes that "two languages in the B1 group, Toram and Birgit, might be currently classified in the wrong subgroup", which means put in other words that both should be



costatistically that Birgit forms a tighter unit with Jegoid as opposed to Muboid and that Jegu-Birgit stands much closer to DM than Muboid,<sup>40</sup> which was neatly reaffirmed by the research by J. Lovstrand (2012).<sup>41</sup> In the view of M.L. Bender (from 1983), Kujarke may perhaps belong also here (as identical???) with Birgit,<sup>42</sup> although the outcome of the lexicostatistical research by both J. Lovstrand (2012)<sup>43</sup> and V. Blažek (2015)<sup>44</sup> suggests that

moved into the DM “sub-group” from the MT one. His scheme (*ibid.*, table 3: percentage of phonologically similar words) shows Jegu scores also much closer to the DM core languages than to MT.

<sup>40</sup> V. Blažek (2008: 135): “Birgit & Toram are closer relatives of Jegu than Mubi. ... Jegu & Birgit are closer relatives of Dangla, Migama, Bidiya than Mubi.”

<sup>41</sup> The research by J. Lovstrand (2012: 17, §3.2, table 3) has resulted in that “the percentage of similar words that Kujarge shares with the B1 group is higher than the percentage shared with other languages in the subbranch. This suggests that Kujarge could be most closely related to the B1 languages.” Which means in his terminology that Kujarke should be grouped in the joint DM-MT cluster (= B1). Moreover, Lovstrand (2012: 18, §3.4) thinks that, although “in the early classification by Lukas, Birgit and Toram were considered dialects of Mubi” and “although no longer considered dialects, Birgit and Toram have been associated with Mubi ever since, in spite of the absence of any linguistic evidence to support the claim.” Referring back to the results by MMW (2007) on the opposition of Birgit cluster vs. Muboid and to those by V. Blažek (2008: 2011) on the closer standing of Birgit and Mogum/Jegu, J. Lovstrand (2012: 19, §3.4) reaffirmed that “These two previous studies are confirmed in the present study. Birgit has 55 percent lexical similarity with Mogum and 50 percent lexical similarity with Dangla. The figures for the comparison of Birgit and any B1.2 language are not higher than 41 percent.”

<sup>42</sup> M.L. Bender (in: Bender & Doornbos 1983: 76, §3.5.7) admitted: “I am assuming ... that Doornbos’ Kujarke is Newman’s Birgit, 1977:6.” His “quick survey” stated how distant Kujarke was from Muboid: “All three (Mubi, Minjile, Kajakse) show only about one quarter in common with Kujarke (24/82 or 29%, 23/88 or 26%, 25/87 or 29% respectively. Thus Kujarke remains an outsider. It may be a Chadic variety heavily influenced by other languages, or a non-Chadic language with influence from Chadic neighbors, or a hybrid. The latter possibility must be taken seriously, since such cases of despised local groups having unclassified languages are common in Northeast Africa ...” Bender & Doornbos (1983: 59-60) are disposed to identify the latter people with the Birgit in the same group: “As Chadic speakers, their name might point to their being Chadian Birgid, because Fur and Daju neighbors of the Sudanese Birgid call them Kajjar, and both Chadian and Sudanese Birgid have the same self-name of Murji.”

<sup>43</sup> Lovstrand (2012: 17, §3.2, table 3) stated even poorer lexicostatistical scores of Kujarke with the ECh. sister languages: with Kajakse 30%, Mubi 28%, Zirenkel 26%, Masmaje 24%, Birgit-Abgué 25%, Jegu-Mogum 26%, Toram 20%, EDangla 27%, Bidiya-Tunkul 23%, Migama-Baro 24%, Mabire 19%, Ubi 16%, Sokoro 14%, Tumak 15%, Saba 12%, Mawa 11%, Barein 20%, Mokilko 9%. Even so, MT seems to be the closest, which made J. Lovstrand (2012: 21, §3.7) classify a close unity of three distinct “ECh. B1” groups: DM, MT and Kujarke. Or as J. Lovstrand (2012: 19, §3.5) argued, “The percentage of similar words between Kujarge and B1 languages averages at about 25 percent. The percentage of similarity with B3 languages averages at about 14 percent. This supports the suspected connection between Kujarge and B1 (Dangla-Mubi group), suggested by Paul Newman (Blažek 2011). Based on this data, it is proposed that a new subgroup be created for Kujarge in the B1 group: B1.3. This subgroup allows the classification to reflect that Kujarge is an East Chadic language most closely associated with the B1 group, but not particularly closely related to either of the B1 subgroups.” I.e., to neither DM nor MT in his terminology.

<sup>44</sup> V. Blažek (2015: 89) has arrived at a scenario displaying a similarly modest lexical share of Kujarke with ECh.: with Kera 26.4%, Lele 36%, Somray 35.2%, Tumak 30.2%, Sokoro 29.4%, Dangla 42%, Migama 38.5%, Bidiya 37.2%, Mokilko 33.7%, Jegu 44.5%, Mubi 47.2%. But here too, as one can see, MT-Kujarke ties are by far the most outstanding, which made him locate the split-off of PKujarke at the ancestral stage of common DM-MT in the ECh. family tree. Henceforth, Blažek (2015: 76), maintains, even if with right hesitation, that “This result does not confirm the affiliation of Kujarke into the Mubi group, although the easternmost member of the Mubi group, Kajakse, is geographically closest from Kujarke (c. 120 km).” With regard to M.L. Bender’s hypothetical scenario (in: Bender & Doornbos 1983: 76, §3.5.7, quoted above) as well as “with respect to a minorite share of Nilo-Saharan parallels in comparison with the dominant share of East Chadic parallels which apparently

Kujarke should be classified outside DM and MT tightly bound to both. Given these controversies, the question of its position must definitely be re-examined.

The deltacistic isophone (demonstrated, e.g., by the “eye” item, cf. fn. 58 below) unite, by the way, Jegoid and Birgit with DM as against the Muboid core. One wonders whether this and other possible peculiarities, along with the manifold affiliation of some Jegoid languages and Birgit with DM, make the question worth being researched whether all these might result in a new grouping in the frames of a mega-DM against the Muboid core, which, besides, displayed the very same peculiarities in this item with the Masa group, whose position has also been disputed.<sup>45</sup>

Beyond this more or less secure inner grouping, there have emerged in the East Chadic and, more specifically, the MT linguistic context some further languages (?) on whose precise classification only speculative impressions have been mentioned in the field research reports but due to the lack of their sufficient lexical-grammatical documentation, their puzzle remains open. Still, following the primary exploratory nature of this series of etymological papers on MT, their lexical items will be used herein with the purpose of facilitating their lexicostatistical callibration by any means.

**1. Jelkung:** although it was listed by R.M. Blench (2006 MS) in his Mubi group, the research by J. Lovstrand (2012: 12, fn. 15) has corroborated its inclusion better in the Sokoro group as the Jalking dialect of Bara/ein.

**2. Mabire<sup>46</sup>** has been provisorically classified by J. Roberts (1993: 16) in the DM group in a surprising and by far a premature manner, which was followed by R.M. Blench (2006),

do not reflect any recent loans,” Blažek (l.c.) assumes that “Kujarke probably represents an independent group of East Chadic branch, perhaps with a closer relation, genetic or areal, to the Dangla-Mubi super-group (the same conclusion was formulated by Lovstrand 2012). ... From the neighboring non-Chadic languages the strongest influence may be ascribed to Fur or better to some of its relatives, because the Fur-like words in Kujarke are rather different from their Fur counterparts.”

<sup>45</sup> P. Newman (1977) decided to exclude Masa from CCh. as a separate 4<sup>th</sup> branch of Chadic, which was disproved by H. Tourneux (1990) who supplied further evidence of its conventional classification inside CCh. (JS 1981: 15, #20; JI 1994 II: XV), which was supported by O. Stolbova (CLD VI 24) also.

<sup>46</sup> J. Roberts (1993: 23, §5.): “Mabire. Spoken around Mt. Mabéré in the old villages of Mabire and Am Jamena. All but extinct. Closest linguistic neighbor is probably Migama, although it’s not clear that it could be considered a dialect of Migama.” Barreteau’s (1978) example was followed by Johnson & Hamm (2002 MS: 4): “Therefore, based on Mabire’s lexical similarity with these six languages, we suggest that Mabire also be grouped in his Dangla/Migama subgroup ...” The brief interview by J. Roberts (1993: 15, §3.10.1.) with a Mabire man in Mongo resulted in naming 4 villages of the Mabiré “who had a different language of their own that only the Mabiré could speak.” The old Mabire man “said they were ‘brothers’ to the Mabiré ... However, I am not sure there is any special historic link between the two groups ...” The puzzle “What is the Mabiré language?” has been approached by J. Roberts (1993: 16, §3.10.2.) in his field research: “Both the Kofa men and Musa Duwane assured us that Mabiré was not like any other language in the area: it is not like Kofa, Ubi, or Bidiyo. The Kofa cannot understand Mabiré either, which explains why the Mabiré in Katch now speak Kofa. Musa did say that Mabiré might be like something in the area of Abou Telfan ... Everyone assured us that the language is no longer being used ... and it would only be older people who would still know it. ... From comparing the few words recollected of the Mabiré language with the data given for Migama ..., we do find a number of similarities. However, there are a number of differences too. We will tentatively conclude that Mabiré is a Chadic language of the Dangaléat-Migama subgroup, but whether it is a separate language or not must await further evidence. At any rate, the language is nearly extinct.” E. Johnson & C. Hamm (2002 MS: 3): “Word list comparison results show a relatively close lexical similarity to the Jegu dialect of Mogum, though not close enough to suspect

the Ethnologue<sub>16</sub> (Lewis 2009), J. Lovestrand (2012: 12, §2.1.6, chart 6)<sup>47</sup> and by O.V. Stolbova (CLD VI 26, III. ECh. B, 5a) also. Still, Mabire was found in the research by E. Johnson & C. Hamm (2002 MS: 4) as sharing almost half of its basic lexicon with Jegu, although they too admitted the score of Mabire vs. Migama of DM to show “not a significant difference”, albeit their lexical comparison, in turn, confirmed the very poor share of lexicon in Mabire as compared to Bidiya and EDangla of DM to be “equally similar”,<sup>48</sup> which is why they have based their fundamental reluctance to group it as yet either in MT or DM upon the other (etymologically unknown) half of the examined Mabire lexicon.<sup>49</sup>

**3. Ubi**, whose significant distance from Bidiya was recognized already by Kh. Alio in 1983,<sup>50</sup> is an even bigger puzzle as almost half (81 items) of its basic lexicon (227 items) turned out to be without a MT or DM etymology in the comparative wordlist of N. Hutchinson & E. Johnson (2006: 6, §3).<sup>51</sup> Ubi shows there the highest lexical share with Mawa, but even this (only one third) remains far below the level desirable to speak of a close status,<sup>52</sup> let alone for Ubi’s very poor common lexicon shared with the other MT and DM languages.<sup>53</sup> The authors perfectly failed to evidence any considerable intercomprehension between Mawa and Ubi both in written and audio-materials. Still, mechanically adhering to the grouping of Mawa and Jegu (Ubi was unconsidered at that time) with Dangla, Migama and Bidiya etc., i.e., within DM, by D. Barreteau (1978), the authors hast-

intercomprehension.” E. Johnson & C. Hamm (2002 MS: 4): Mabire vs. Jegu dialect of Mogum 45% ( $\pm 7.4\%$ ), vs. Baro dialect of Migama 39% ( $\pm 7.3\%$ ), vs. Tunkul dialect of Bidiya 34% ( $\pm 7.1\%$ ), vs. East Dangla 34% ( $\pm 7.1\%$ ), vs. Ubi 26% ( $\pm 8.2\%$ ), Mawa 18% ( $\pm 5.7\%$ ). “From these results, Mabire appears to be the most lexically similar to the Jegu dialect of Mogum, ...”

<sup>47</sup> Lexicostatistical analysis by J. Lovestrand (2012: 17, §3.2., table 3) resulted in the following percentage of phonologically similar words shared by Mabire with: Mubi 30%, Kajakse 31%, Masmaje 31%, Birgit-Abgué 45%, Jegu of Mogum 48%, Toram 42%, EDangla 41%, Tunkul of Bidiya 42%, Migama-Baro 44%, Zirenkel 27%, Ubi 29%, Sokoro 26%, Tamki 28%, Saba 26%, Mawa 26%, Barein-Jalkiya 28%, Kujarke 19% etc.

<sup>48</sup> Turning away from the lexicostatistical score of Mabire vs. Jegu, E. Johnson & C. Hamm (2002 MS: 3) state: “there is not a significant difference between this figure ... and that of the similarity between Mabire and Migama due to the high margins of error ... Mabire appears to be equally similar to the Tounkoul dialect of Bidio as to the Eastern dialect of Dangaleat, with a lesser similarity to Ubi and Mawa.”

<sup>49</sup> E. Johnson & C. Hamm (2002 MS: 3): “As it appears that Mabire shares less than half its vocabulary with any of these other languages, it seems appropriate that Mabire be considered a separate language, rather than a dialect of one of these, a language which in a few years will likely be extinct.”

<sup>50</sup> As rightly stated by Kh. Alio in the Chadic Newsletter (1983), who was probably the first to explore this language, Ubi is rather different from Bidiya: “Les Ubi sont sous l’autorité administrative du Canton Bidiyo, cependant ils parlent une langue assez différente de bidiya. Selon les Ubi, leur langue serait proche du mawa, une autre langue tchadique de la région.” He reported also that “nous avons pu également remplir un questionnaire de 400 termes et recueillir quelques informations grammaticales”.

<sup>51</sup> The research by N. Hutchinson & E. Johnson (2006: 6, §3) has also only led to a partial result as out of the 227 terms collected in Ubi, only 146 words “were judged to be comparable with the items on previously elicited wordlists in the related Chadic languages of Mawa, Mogum (Jegu dialect), Dangaleat (Eastern dialect), Bidiyo (Tounkoul dialect), Migama (Baro dialect). A wordlist in the dying of Mabire was also elicited from some individuals in Oubi-Oulék and added to the comparison.”

<sup>52</sup> This made Hutchinson & Johnson (2006: 7, §3) conclude to that “Mawa is the most closely related dialect to Ubi. However, at thirty-seven percent this is still far below the maximum threshold of seventy percent from which we consider intercomprehension possible.”

<sup>53</sup> The percentage of lexical similarity among the selected languages in the wordlist of N. Hutchinson & E. Johnson (2006: 6, §3): Ubi vs. Mawa: 37% ( $\pm 6.6\%$ ), vs. Mabire 26% ( $\pm 6.5\%$ ), vs. Jegu 23% ( $\pm 5.7\%$ ), vs. EDangla 19% ( $\pm 5.3\%$ ), vs. Migama 20% ( $\pm 5.5\%$ ), Bidiya-Tunkul 21% ( $\pm 5.5\%$ ).

ily sided with including Ubi in DM.<sup>54</sup> Thus, their decision must be treated with caution until a more profound analysis becomes available. Having used the lexicostatistic method, V. Blažek (2008: 134-135, tree-diagrams 5-6; 2011: 41-42) excluded both Ubi and Mawa from DM<sup>55</sup> and firmly sided with classifying both in the Sokoro group.<sup>56</sup> The same position was assumed by J. Roberts (2009), O.V. Stolbova (CLD II 17; III 11; VI 26) and J. Lovstrand (2012: 11, §2.1.6),<sup>57</sup> although R.M. Blench (2006 MS) only moved Mawa to Sokoro, not Ubi. The question of Ubi affiliation remains open, it seems. Suffice it to adduce here the cognate set for “eye” warning of the Ubi vs. MT vs. Masa isophones.<sup>58</sup>

<sup>54</sup> Hutchinson & Johnson (2006: 7, §3) guessed that “based on Ubi’s lexical similarity with these six other languages, it may be appropriate that Ubi be included in his Dangla/Migama subgroup ...”

<sup>55</sup> V. Blažek (2015: 41): “In the most recent issue of *Ethnologue* (16th ed., 2009), Ubi is classified as a language closely related to Bidiya, Migama, Dangla, and especially Mawa. The model accepted in *Ethnologue* represents only a light modification of the model proposed by P. Newman (1977), but without Ubi.”

<sup>56</sup> Having almost completely performed “the mutual lexicostatistic comparison of all East Chadic languages”, V. Blažek (2011: 53) found “the results are convincing enough to determine the position of Ubi in other way than it was indicated in the last edition of *Ethnologue*, namely together with Sokoro and other close idioms, Mawa and Barain. One argument is the score 60% of the common basic lexicon for Ubi & Sokoro, 62% for Sokoro & Mawa and even 73% for Ubi & Mawa. ... Summing up, in the genetic classification of the Chadic languages, Sokoro does not represent a group consisting of only one language, but a cluster represented at least by four idioms: Sokoro, Ubi, Mawa, Barain.” Using these of his own lexicostatistical results (see also Blažek 2008: 133, table 2 and 135, tree-diagram 6) demonstrating significantly high percentages of common cognates for Ubi vs. Mawa (77,8%) and Ubi vs. Sokoro (60-70%) as opposed to Ubi vs. Dangla (44%), vs. Migama (42%), vs. Jegu (45%), vs. Mubi (36%), vs. Mokilko (33%), Somray (26%), Tumak (33%), Lele (33%), Kera (29%), V. Blažek (2015: 41-42) was convinced that “Contrary to the classification proposed in *Ethnologue*, Ubi and Mawa should be classified together with Sokoro and Barain and not together with Bidiya, Dangla, Migama, etc.”

<sup>57</sup> Lexicostatistical analysis by J. Lovstrand (2012: 17, §3.2, table 3, also p. 18, §3.3) resulted in the following percentage of phonologically similar words shared by Ubi with: Sokoro 47%, Tamki 45%, Saba 46%, Mawa 46%, Bareyn-Jalkiya 27%, Mubi 27%, Zirenkel 26%, Kajakse 24%, Masmaje 24%, Birgit-Abgué 22%, Jegu of Mogum 26%, Toram 21%, EDangla 27%, Tunkul of Bidiya 26%, Migama-Baro 27%, Mabire 29%, Kujarke 16% etc.

<sup>58</sup> Cf. CCh. (?): PMasa \*ʔir- “1. eye, 2. to see (?)” [GT]: Masa-Bongor írã “yeux”, ìrã “visage” [Jng. 1971/2 MS: 25, 69], Masa írã “yeux” [Mouchet] = ìr “1. (tr./intr.) voir, 2. (verbo-nominal) [îrã] le fait de voir, la vue, 3. (verbo-nominal) [îrã] les yeux, [îrã] l’oeil, 4. (méton.) [îrã] le visage” [Caïtucoli 1983: 90], Gizey/Wina ʔär, Masa ʔir, Ham ʔii, Musey ʔii, Lew ʔir, Marba ʔir “oeil” [Ajello et al. 2001: 40], Gizey ʔär, Wina ʔir, Masa ʔir ~ ñir (sic), Ham ʔii, Musey ʔii, Lew ʔir, Marba ʔir “visage” [Ajello et al. 2001: 58], Zime-Dari ir [Strümpell] = ʔi (sic: no -r) “1. oeil, 2. graine” [Cooper 1984: 1], Zime-Batna í(:)r [Jng.] = ír [Sachnine], Lame ʔir “oeil” [Sachnine 1982: 451] || ECh. \*ʔiri “eye” [GT] > Kwang-Mobu t-è:ði [Jng.], Kera d-àr [Ebert] | Kabalay č-ídi [Sachnine] < \*t-ídi [GT] | Somray d-ùdi [Jng.], Tumak tùur [Caprile] | Sokoro id- [Nachtigal] = yidi [Barth in Lukas 1937] = iri (fem. pl.) “eyes” [Saxon 1977 MS: 3, #4] | WDangla ódò (ódò?) “oeil” [Fédry 1971: 41], EDangla ùdā (f), ùdā “1. l’oeil, 2. le tas à vendre” [Dbr.-Mnt. 1973: 325], Koralongo ùdò “l’oeil” [Dbr.-Mnt.], Bidiya ʔudfya (f), pl. ʔude “oeil” [AJ 1989: 122], Migama ʔidè (f), pl. ʔidi “oeil” [JA 1992: 92], Mawa iíd-ín (f) “oeil”, írró “mon oeil”, ídim “dein Auge” (“ton oeil”) [Jng. 1978 MS: 8] | Muboid \*ʔiriiny “eye” [GT]: Mubi írín (f), pl. áràn “Auge” [Lukas 1937: 182] = \*írín “eye” [Doornbos-Bender] = ʔírínì (f), pl. ʔàrà “1. oeil, 2. petite rivière” [Jng. 1990 MS: 24], Minjile \*irini “eye” [Doornbos-Bender], Kajakse \*árfín “eye” [Doornbos-Bender] = ʔáriinì, pl. ʔarìn “oeil” [Alio 2004: 239, #31] (Muboid: Doornbos-Bender 1983: 77, #25) vs. Jegoid \*ʔude, pl. \*ʔodo, var. (?) \*ʔuđe, pl. \*ʔođo “eye” [GT]: Jegu ʔúdè, pl. ʔódó “Auge” [Jng. 1961: 117], Kofa ʔúdè (f), pl. ʔóđó “eye” [Jng. 1977 MS: 3, #4], Toram ʔudò (Alio: sg., GT: pl.?) “oeil” [Alio 2004: 263, #444] vs. Birgit ʔúdi (f), pl. ʔóđó “oeil” [Jng. 2004: 359] (ECh.: JI 1994 II: 127). The -r- of Ubi ʔiri (so, without -n) “oeil” [Alio 2004: 271, #144] is revealing just as in Mokilko ʔër-sa/ár-sa “eye” [Jng. 1990], which tells us that neither can derive from delatcized DM as supposed or favored.

## Introduction to the Mubi-Toram etymological project

Mubi-Toram is the last (namely, the 26<sup>th</sup>) and so the easternmost group in the Chadic classification proposed by H. Jungrauthmayr (JI 1994 II: xv). Some of these languages are scattered pretty close to the border of the Chad Republic with Sudan (whereas others are spread in the middle and the mid-western zones of Chad).<sup>59</sup> For some (scientifically founded?) reason or by tradition, however, the Chadic nomenclature has always been started from the westernmost geographical extremity, although the immigration of ancestral Chadic tribes took place from the East. Already R.M. Blench (2008)<sup>60</sup> and V. Blažek (2015)<sup>61</sup> have noted the particular lexical affinity of Kujarke to Cushito-Omotiic. One is thus disposed to side with R.M. Blench (2008)<sup>62</sup> suggesting Kujarke to be regarded as a remnant of the last proto-Chadic invaders from the eastern direction. This hypothesis of the immigration by proto-Chadic pastoralists through the Wadi Howar into Lake Chad zone was most recently also echoed by H. Jungrauthmayr (2020).<sup>63</sup> Although until most recently, these assumptions had escaped my attention and I have so far never ventured to publish about these utmost puzzling and exciting moments of the linguo-archaeological reconstruction of

<sup>59</sup> Like, e.g., the Kajakse and Kujark/ge, the easternmost forerunners (?) of the Chadic family examined by P. Doornbos and M.L. Bender (1983: 59-60), who localized Kajakse in “Wadai, between 12 and 13°N and between 20°30’ and 21°30’E. ... The Kajakse are concentrated around Jebel Kajakse and five similar hills in the neighborhood”. The Kajakse are known to them “also as refugees in the border zone on Sudanese territory.” They described the Kujarge as inhabiting “seven villages in Chad near Jebel Mirra (11°45’N – 22°15’E); also scattered among Fur and Sinyar in Sudanese villages along the lower Wadis Salih and Azum.” Both authors state that “informants disagree whether their origin lies in Darfur or in their present habitat. The Kujargé are bounded to the west by the Daju-Galfigé; to the north by the Sinyar; to the east and south by the Fur-Dalinga, Fongoro, Formono, and Runga. ... This population may very well have been slaves of the Daju Sultans of Der Sila, removed from the western boundary by force or conquest, to protect or populate the eastern boundary of the sultanate.”

<sup>60</sup> The case of rather isolated Kujarke, as we learn from R.M. Blench (2008 MS: 2), “points to its particular lexical links with Cushitic and Chadic. Some of these are quite surprising, and it seems conceivable that Kujarge represents a very conservative language that formed part of a chain of languages linking these two regions of Africa.” Referring to the unpublished Kujarke 200 item wordlist by P. Doornbos, J. Lovestrand (2012: 19, §3.5) claimed: “While there are some words on the list that point to links with other Afroasiatic families, Kujarge shares more lexical similarities with East Chadic than any other group (Blench 2008, Blažek 2010). It is suggested that these cross-family similarities may be retention of archaic forms and more evidence of the links between Afroasiatic families.”

<sup>61</sup> Having examined “specific isoglosses connecting Kujarke with all East Chadic groups”, V. Blažek (2015: 76) has also observed “remarkable, although sporadic, links to Omotic, Cushitic or Berber, confirm an archaic character of the Chadic stratum of the Kujarke lexicon. In regard of the position of the easternmost Chadic language it is not so surprising (cf. Blench 2008).”

<sup>62</sup> In the frames of his daring, albeit tempting, scenario “of a migration of Cushitic speakers westward”, that is a “gradual migration of pastoralist peoples ... from the Nile Valley to Lake Chad”, associated with “the Leiterband pottery tradition that has been identified in the Eastern Sahara, most specifically in the Wadi Howar, which is a now dry river system that stretches over 1000 km between Eastern Chad and the Nile Valleybed”, R.M. Blench (2008 MS: 4) has apparently meant Kujarke to represent one of the linguistic remnants at the easternmost Chadic end of this once “fluent” historical corridor ...

<sup>63</sup> For the hypothesis of a long wandering of Chadic ancestors through the Wadi Howar due to disappearing green Sahara in the Holocene see most recently Jng. 2020, esp. 15-18 and 34-44.

the AA prehistory,<sup>64</sup> I have only slowly come to surmise something about the exclusive isoglosses between Muboid and Omotic on my own since my regular sessions on my AA root catalogue have been renewed in spring 2019.

The fact that this was one of the least studied Chadic groups from the standpoint of both lexicography and comparison, has greatly inspired to start my project for a Mubi-Toram comparative lexicon in summer 2008,<sup>65</sup> whereby the first etymological fruits have been published more than a decade ago in my first paper in this series (Takács 2009). Since then, however, serious new results have become available from the research of the SIL and other linguists on the East Chadic languages to me in my research, which had to be reflected in this 2nd part also, which has resulted in this unusually long extended introduction. For almost each of the MT daughter languages (and also for those some others, at least, only ever supposed to belong to MT), usually we already find just one wordlist, among them perhaps only Mubi is relatively better provided with source<sup>s</sup>.<sup>66</sup>

This is a substantially new situation of being significantly better, albeit not yet sufficiently, equipped with lexical sources for the language group that belongs to the geographically easternmost periphery of the East Chadic subbranch and this fact represents a potential bridge in the remote “green Saharan” prehistory leading towards the westernmost periphery of the other geographical corpus of the SAA block, i.e., Omotic in Western Ethiopia, which poses an extended bunch of new research tasks of this series of papers<sup>67</sup> as well

<sup>64</sup> Perhaps except for my discouraged surmise as for the origins of the dendronym of ebony, cf. Takács 2021.

<sup>65</sup> The author expresses his gratitude to the Alexander von Humboldt-Stiftung (Bonn, Germany) for permanently supporting his research in 1999-2000, 2002, 2005, 2008, 2020 at the Institut für Afrikanische Sprachwissenschaften of the J.W. Goethe University (Frankfurt a/M), where the materials a.o. for the present paper were mostly collected. My cordial thanks go also to late Prof. Khalil Alio (University of N’Djaména, Chad Republic), may his memory be blessed, for submitting his field research records of the Mubi-Toram languages at my disposal in 2002.

<sup>66</sup> • **Birgit**: Jng. 1973 MS and 2004; MMW 2007: 43-49, §A.4 (3 dialects: Magrane, Agrab, Abgué-Dabdab); • **Jegu**: Jng. 1961: 109-123; Hutchinson & Johnson 2006: 22-24, Appenix C (as Jegu dialect of Mogum); • **Kajakse**: Doornbos’s 1979-1981 field research records published in Bender-Doornbos 1983: 76-78, table 7; Alio 2004: 239-248, §3.5.; MMW 2007: 43-49, §A.4 (dialect of Amtalaté); • **Kofa-Mogum**: Jng. 1977 MS; Roberts 1993: 16 (some words); • **Kujarke**: Doornbos’s 1979-1981 field research records were partly (only 100 items of the basic lexicon) published in Bender-Doornbos 1983: 76-78, table 7, but his unpublished 200 item Kujarke wordlist was partly used by J. Lovstrand (2012: 49-51, Appendix 2: “Possible Kujarge-East Chadic B cognates”) and by V. Blažek (2015: 76-83: “A. Core wordlist” with some 98 items published by Doornbos in 1983 well etymologized in Ch. + pp. 84-87: “List B” with hitherto unpublished items collected by Doornbos that Blažek mostly failed to compare within Ch. or even AA); cf. also Blažek 2013 with AA cognates to the 200 item Kujarke wordlist; • **Mabire**: Roberts 1993: 16 (some words); Johnson & Hamm 2002 MS: 5-9, Appendix A; Hutchinson & Johnson 2006: 19-21, Appenix C; • **Masmaje**: Alio 2004: 280-285, §5; MMW 2007: 43-49, §A.4 (dialect of Amlaména, Hilélé); • **Mubi**: Lukas 1937: 180-191; Doornbos’s 1979-1981 field research records published in Bender-Doornbos 1983: 76-78, table 7 (as Minjile treated as distinct from Lukas’ Mubi); Jng. 1990 MS and 2013; Johnson 2005: 14-18, Annexe B; Mbernodji & Johnson 2006: 23-28, Annexe D; MMW 2007: 43-49, §A.4 (Saraf Abuzbah dialect); • **Toram**: Alio 1988 MS and 2004: 252-263, §4.; • **Ubi**: Alio 2004: 267-276, §4; Hutchinson & Johnson 2006: 19-24, Appenix C; • **Zirenkel**: Johnson 2005: 14-18, Annexe B; Mbernodji & Johnson 2006: 23-28, Annexe D.

<sup>67</sup> Its first part with roots having a \*b- in the *Anlaut* was published in *Acta Orientalia Acad. Scient. Hung.* 62/3 (2009), 315-336. The third part of this series examining the MT lexical stock with \*b̥- is going to be published in *Lingua Posnaniensis* 65/1-2 (2023).

as of the projected comparative-etymological lexicon of the Mubi-Toram languages in addition to those originally intended in 2008-9:

**1.** Our task has always been first of all to have a solid proto-lexicon and comparative phonology of the MT and step-by-step of all the other neglected Chadic groups.<sup>68</sup> The success of modern research on Chadic phonological and lexical reconstruction (initiated by V.M. Illič-Svityč and P. Newman in the mid-sixties of the 20<sup>th</sup> century) fundamentally depends on how the internal (Chadic) reconstruction and external (Afro-Asiatic) comparison of every single individual Chadic language group proceeds at the same time.

**2.** The present series is to integrate this remote and peripheral lexical stock in its wider Chadic and Afro-Asiatic etymological context. This, as a side-effect, may facilitate a more secure and satisfactory settling of the puzzling isolates or etymologically unexplored Chadian languages ever linked with MT by providing further materials for the lexicostatistical research outlined above. This is why the present work and certainly a few further hopeful sequences of this series should contain for this purpose, even if some linguists may oppose, data from languages whose position is heavily debated in and around MT. Of course, I readily believe lexicostatistical scores, but I prefer to examine much more of further possible phonological and lexical evidence and not to close the debate over Kujarke, Mabire, Ubi etc., which, even if these eventually turn out to lie outside MT, may supply nice asset for this debate. It may well be that with the progress of this project, the Jegoid-Birgit block will definitely end up with DM and detached from Muboid. It was not by chance that, following my own superficial impressions, I had started back in 2008 working on the comparative lexicons of both MT and DM and combined their etyma in the same entries.

**3.** Even isolated glosses were treated since, as I have slowly come to understand in the course of my research over the past few years, MT as a peripheral Chadic group displays a unique lexicon with a considerable non-Chadic, albeit AA, traits. The increasing bunch of astonishing exclusive Omo(tic)-Chadic isoglosses renders this series of papers at a time an arena of matches that point far beyond the boundary of Chadic and may contribute to SAA prehistory, something I had not even been dreaming of when I had begun working on these languages in summer 2008.

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<sup>68</sup> Unfortunately, out of the 26 Chadic groups, only six (namely, Angas-Sura, Bole-Tangale, North Bauchi, Bura-Margi, Mafa-Mada, Kotoko) have been so far more or less satisfactorily studied from this viewpoint. Although my research on the lexical reconstruction of the individual Chadic groups dates back before the turn of the millennium (thus, e.g., Angas-Sura since 1998, Dangla-Migama and Mubi-Toram since 2008), my work in this domain has only become accelerated and more extensive since the spring of 2019, when a whole set of further Chadic groups (North Bauchi, Musgu, Masa) as well as Southern Cushitic and Omotic were subject to a simultaneous comprehensive lexical reconstruction. This research has been manifested since 2021 in the new project of micro-reconstructions in the Southern Afro-Asiatic lexical root stock with the support by the grant “Advanced Research in Residence” (ARR) of the University of Łódź, which I gratefully acknowledge in this place.

## Abbreviations of languages and other terms

AA: Afro-Asiatic (Afrasian, Semito-Hamitic), Brb.: Berber (Libyo-Guanche), C: Central, Ch.: Chadic, Cu.: Cushitic, DM: Dangla-Migama, E: East(ern), Eg.: Egyptian, MT: Mubi-Toram, N: North(ern), Om.: Omotic, S: South(ern), Sem.: Semitic.

## Abbreviations of author names

AJ: Alio & Jungrauthmayr, Dbr.: Djibrine, JA: Jungrauthmayr & Adams, JI: Jungrauthmayr & Ibriszimow, Jng.: Jungrauthmayr, JS: Jungrauthmayr & Shimizu, Mnt.: Montgolfier, MMW: Marti, Mbernodji, Wolf, NM: Newman & Ma.

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