### **Hausa Literature Debates Series 2**

## Hausa Literature and Information Technology in the decade of the 1990s

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#### Introduction

The current "titanic" debates that punctuate the pages of this paper about the merits or demerits of the more or less recently created Hausa *soyayya* genre of creative writing, I feel, loses sight of many salient and very significant points in the literary development of the Hausa nationality and how it reflects on the uses of the novel among the Hausa, particularly of Northern Nigeria. I intend to argue that the widespread availability of information technology facilities in the decade of the 1990s has provided the bedrock around which the innate creativity of Hausa writers found expression. Without this technology, there would not have been such literary output at such scale. In this regard, I wish to chronicle the development of the technology as it affects Hausa writing in Kano.

# The supportive Technology for Hausa Literature in Kano

Despite the great flood of *soyayya* writings in the Northern markets, it should be appreciated that many worthy experimental novels, or novels more earnest than entertaining, gather dust in manuscript or are circulated privately in poorly produced typewriter scripts. Indeed, the difficulty that some unestablished novelists find in gaining a readership (which means the attention of a *commercial* publisher) has led them to take to the personal publishing routes of gaining attention. In Kano this has spectacularly developed into a single cottage industry, and was given a boost in early 1990s by the widespread availability of the Personal Computer (PC) and the development of Business Centers in the metropolis.

Curiously, the IBM personal computer we take for granted now is a recent affordable technology; for it was created only in 1981. The early personal computers were not only cumbersome, but also awesomely expensive with software requiring an acquisition of arcane non-transferable skills. However, corporate competition and market-driven forces made the prices tumble down sufficiently for the machines to be affordable. Such that by early 1990s business centers, initially with electric typewriters (with "memory") started to emerge with computers. Some of the early computing pioneers were Amstrad PCW dedicated word processors that seemed to suddenly open up a whole new world to a generation brought up on Olympic typewriters. The transition to "proper" computers in the form of the early 386s that pervaded the Kano markets in the early 1990s opened up the literary establishment to a faster mode of processing information. Eminent Kano pioneer business centers that emerged in this era included Abacus Computer Services, Midtown Business Services and City Business Center. Incidentally, each has its own focus clientele which helps to understanding the emergent literary and publishing trend in Kano.

Abacus pioneered the Arabic typesetting industry in Kano and thus made it possible for the earliest *prayer* genre books to appear in the market. This was made possible by Abacus being the first to acquire the DOS-based *Universal Word* program which included Arabic language module in its multi-lingual structure. Midtown is a high-end upper middle class establishment with emphasis on professional typesetting and ultimately more powerful computers with emphasis on graphic-based work. Its pioneering role was in its being one of the first to acquire a HP Scanjet scanner in 1993 and thus quickly scan documents and photographs directly into the computer. It is from its studios that initial color separations (what some Kano printers contemptuously call "burum-burum" color separation to indicate that it is not high-definition) that characterize the covers of the *soyayya* genre books were made. The scans were made from art work initially drawn by professional artists dotted around Kano, although the most patronized seemed to be the resident artists at the Kano State History and Culture Bureau.

Perhaps the biggest role in the production of the *soyayya* genre was played by City Business Center, located right in the heart of the Kano city, and about five blocks away from the Gidan Dabino publishing house along the same street. The focus of City Business Center — cheap, cheerful and flexible — is on Hausa writing which was later expanded to include Arabic typesetting. To date, the City Business Center has typeset more than 800 of such books and their associative forms. Incidentally, some of the operators at the City Business Center were so caught up in the frenzy that they became character actors of the films from which the novels are being increasingly adapted.

However what really transformed the literary process — spearheaded by the soyayya genre — in Kano was the availability of Windows 3.x software. Windows 3.1 became available world-wide in April 1992. With it came a whole raft of features that made its predecessor (Windows 3.0 released in May 1990) positively archaic. Windows 3.1 came with support for TrueType font technology, and suddenly it became possible to produce good-looking manuscripts that at last begin to look like real printed books! So much was Windows held in awe that its default font of *Arial* used by the crude resident word processor Write, was automatically used by business center operators and unchallenged by the authors who were only too happy to see their works better produced than on typewriter. Until then WordPerfect 5.0 had been the predominant Dos-based word processor. Its default *Courier* font — especially printed crisply on a laser printer — merely made an ugly typeface more tolerable. Windows changed all that to such an extent that the basic word processor in Windows, Write, was universally used by most of the earlier authors — simply because of its Arial font!

With the availability of more powerful machines in mid-1990s (by 1995 the common computer configuration was 486DX2-100/8MB Ram/350 HDD capable enough of running Windows 95), the availability of more powerful Windows word processors (*Microsoft Word* remained dominant among computers in Kano) and the realization that the fonts can be added to the system, the Hausa literature went into an overdrive. Hitherto the production of Hausa literature was, from its infancy, institutionalized.

The transformation of the Translation Bureau into Literature Bureau in 1935 by the colonial Government yielded a clutch of books that forced a specific mode

of thinking that was very pro-establishment, even though the arch-Svengali of the Northern literary evolution, Dr. Rupert East acknowledged that it was difficult convincing the founding fathers of Hausa literature that it was worth doing. The saccharine cloyingness of the early Hausa classics succeeded in trapping whole generations of readers in a gridlock of village simplicity and were the epitome of *cultural correctness* — as reflected in that period.

The outburst of information technology in the early 1990s is the wake-up call for the silicon breed and the formation of urban defence league guerillas ready and willing to emphasize that urban is good, desirable and a way of life. Whether motivated by greed and tinsel or desire to contribute their widow's mite to Hausa literature, the floodgates opened and the result was literally thousands of publications (all self-sponsored) many with cheerfully gaudy cover art work with a liberal use of decorative fonts. Incidentally, except for few centers, Adobe (then Aldus) PageMaker and Microsoft Publisher, two leading desktop publishing packages, were largely ignored, perhaps because of their steep learning curves. QuarkExpress, the leading DTP package on the planet, was unknown or possibly unavailable, even to the few Macintosh freaks brave enough to merely display their Apples! The result was cut-pastecut style of straightforward word processor printout that characterizes the poor finishing of most of the early Kasuwar Kurmi Hausa literature genre.

By then also the business center phenomena has exploded in Kano. More sprung up, and the competition became fierce — giving greater choices and thus encouraging more authors. I think this is perhaps the singular most significant contribution of the computer technology in the development of the Hausa literature. Typesetting a novel with pretty fonts and fancy graphics does not make a good book; but the availability of the technology has made it possible for writers to refine their methodology far much more easily over time.

## **Enter Hausa Fonts**

Although the computer has made it possible to write a lot in a short time, there were, of course, limitations. For one thing, it was not easy to *spell-check* Hausa writings due to inherent lack of a spell-checker for the Hausa language in virtually all the word processors. Consequently the printed books suffer from a large number of spelling errors, missed words and incomplete expressions — errors easy to correct in any document when using any European language (some of the word processors have multi-lingual support that includes only Afrikaans in their African repertoire; even the Arabic is the Middle Eastern variety).

Another limitation of the computer typeset documents was the lack of hooked letters — ~ ] } and their capitals, | { [ — characteristic of Hausa orthography (and ` for Fulfulde). While the Hausa language font sets were widely available for the Macintosh computers, they have not been so easily available for the IBM PC. This has not deterred the Hausa writers from writing; but it does reduce the impact of their messages since the precise inflexions are missing in their prose. Further, availability of the Hausa font character sets, even on the Macintosh, was restricted to academic circles (for instance the National Language Development Center, Abuja which has the character sets for all major Nigerian languages).

An insight was provided to the solution by pioneering work undertaken by both myself and a colleague. To overcome the limitations of spell-checking, my colleague started developing a wholly Hausa Windows word processor — complete with drop-down menus, selections all in Hausa. Not being linguists in the trained sense of the term, we were not sure whether some of the translations were accurate enough. *Cancel*, for instance was a bit tricky to translate in a way meant by canceling a Windows application. Do we say *soke*, or *a bari* (*an fasa!*)? And *OK*. Do we translate it as *ya yi*, or *dai-dai?* Being Kanawa we tended to aggregate to Kano Hausa. Would our translations be acceptable across the board to our cousins in Kebbi, Zangon Daura, Azare, Yola, or Zariya?

This clearly convinced us of the need for collaborative efforts in software development. So we establishment a small task-force comprised of programmers, linguists and writers — all computer nerds. The codename for the word processor was *Marubuciya* which the colleague (the main programmer) developed. Indeed a tentative prototype of the *Marubuciya* was developed which was shown to interested linguists sometime in 1994 in Kano and was well received.

The initial development of the Hausa word processor was done with Microsoft Visual Basic 1.0 which was rudimentary and reflected on the prototype Marubuciya. What we needed was sponsorship to purchase the a more powerful programming language (e.g. Borland C++ Microsoft C++, or Visual Basic Professional), font design packages (such as Fontographer, Fontmonger) as well as development time in the form of a sabbatical to concentrate on the various aspects of the word processor (the core programmer, the linguist to develop the spell-checker, an artist to guide on its appearance and a writer to write the manual). The idea was that *Marubuciya* will be targeted at secondary school leavers who lack the linguistic exposure to properly understand the complex command structure of more sophisticated word processors like Microsoft Word and WordPerfect. Our preliminary survey did show the vast majority of the business center operators on the Hausa literature scene in Kano were from this sampling frame. However despite attempted contact, no one was willing to sponsor such venture in Kano so we gave up, and disbanded the team.

However, not ready to give up totally, I decided to pursue a strand of project — font development — to its logical conclusion. This is based on the fact that any TrueType or postscript font can be used by any application in the Windows environment. The required font development platform — Fontographer 3.5 — was acquired through the good will of some American friends (which I gathered later cost well over \$300!) and I set to work.

To develop the Hausa font I needed to work with a template. This presented two questions before the font could be created. First, which font to convert to Hausa? Second, which keyboard characters to "kill"?

Of the numerous fonts available I decided, quite arbitrarily I must add, to modify Times New Roman. In the first instance, it is a body typeface, meant for body text writing. It is also a serif font (with the curly bits at the end of the stems), so it is easier to read. The process involved loading the font into

Fontographer and artistically working on the stems of the necessary characters create the hooks.

As for which characters to "kill", that was easy enough; q, x, v with the capitals all went away to make room for \ ] [. I initially toyed with the idea of destroying "p" — until I saw how Panshekara and Panisau (suburbs in Kano) were spelt. The initial resultant font was named rabiat, a name with a specific maternal sentimental value to me. The first version was rather crude, and clearly reflected the fact that it was developed by a non-artist (science thus requires the creative arts to flourish!).

Rabiat TrueType font was meant to be used in pure Hausa writing where the killed keyboard characters would not certainly be used. It was released in Kano on 10<sup>th</sup> February 1995. A specimen is included in this article as Figure 1.



Fig.1. Keyboard map for (new) Rabiat TrueType font (Rabiat.ttf) showing Hausa characters

However, feedback indicated an increasing number of Hausa literary works that include English words either in quotation or in Enghausa form (e.g. Khammes' *Matsayin Lover*). This led to a need to revise *rabiat* TrueType font.

A breakthrough (and in science there is always a "lucky break"!) came in the form of contact with American Summer Institute of Linguistics (SIL) based in Texas, United States. The SIL has developed a series of phonetic typesets for essentially academic use in mid 1990s based on International Phonetics Association (IPA) guidelines. The IPA fonts were first generation of SIL Encore Fonts — scalable outline fonts for both Macintosh and Windows systems. They contained every base character, diacritic, and suprasegmental mark prescribed by the International Phonetic Association, including the 1989/90 Kiel Convention revisions. Most significantly, they contain at least two Hausa hooked characters ~ and ] (curiously enough, without } or their capitals). However, to use these two Hausa characters, you must use Alt and a sequence of numbers on the keyboard. This was too cumbersome, especially to those not familiar with computers. Thus the first task was to "bring out" the fonts into a more accessible keyboard location.

Still using the same Times New Roman as a template, this time I round I decided to kill off square [ ] and curly { } brackets; the tilde ~; and pipe filter | — the assumption (untested!) being that these characters are not used in any form of writing — on the keyboard to obtain the six Hausa typefaces. This involved first using the versatility of Fontographer move the two available

characters (~ and ]) from the SIL package to the Times New Roman template (times.fog) in Fontographer, and then creating } [ | { droopings (or curlies!) using the drawing facilities of Fontographer. Thus in the keyboard positions of these non-alphabet characters were substituted with the six Hausa hooked characters. The result was a self-named font, *Ibtissar*. A copy of it is included as Fig. 2. Incidentally, *Rabiat* was also revised so that all its Hausa character sets look similar to those in *Ibtissar* TrueType font.



Fig. 2 Keyboard map for Ibtissar TrueType font (Ibtissar.ttf)

The naira (\_) sign is on the underscore charater in upper right. This was as a result of another lucky break. I was tired of crossing the capital N to get the Naira (H) sign, but all attempts to create a neat Naira sign in Fontographer failed! I had almost given up when I noted, during one of my font tinkering, that WP Typographic font — the WPHV04.ttf — contained a naira sign. This font comes with default installation of WordPerfect for Windows 6.1a (which, incidentally also came with WPArabic font — thus obviating the need for a separate Arabic word processor). The naira sign was transplanted in Fontographer to Ibtissar font template to replace the underscore (\_).

Both *Rabiat* and *Ibtissar* TrueType fonts were not perfect, but as first versions, they served the purpose for which they were intended to serve without the cumbersomeness of a whole software development team. The City Business Center in Kano was the first to adopt both the *rabiat* and *Ibtissar* fonts and it has helped in producing the proper accentuation in the Hausa typesetting. More development efforts needed to be done to perfect the fonts. For instance, there are no italic, bold or bolditalic weights for these two Hausa fonts. Thus when using them in these weights, you have to rely on the on-screen interpretation of the base fonts.

Another limitation was also lack of decorative typeface in Hausa font medium. Most users ask for Arial which is used as display type. So watch this space for further developments!

By the way, I have decided to place these two fonts in the public domain. This means they are *free* to whoever sends me a floppy 3.5" diskette (with return postage!); alternatively just drop by if you happen to be in Kano, and collect them. You will get the two fonts, as well as two \*.pcx files that show the keyboard maps of the two fonts (illustrated above). The only condition attached to their availability is that *you should also give them free* to whoever wants them without charging anything. Remember also you must use either

WordPerfect for DOS 6.0 (not 5.1), Microsoft Word for DOS 6.0 (not 5.0) or Windows to use these Truetype fonts.

Incidentally, later the IPA produced Hausa font set, with all the weights (normal, italic, bold, bolditalic) and professionally drawn Hausa character sets in all the four weights (normal: } ] { [ | \ ; bold, } ] { [ | \ italic, ] ] { [ | \ italic, } ] { [ | \ italic, } ] { [ | \ italic, ] ] { [ | \ italic, } ] { [ | \ italic, ] { [ | \ italic, ] ] { [ | \ italic, ] ] { [ | \ italic, ] { [ | \ italic, ] ] { [ | \ italic, ] { [ | \ italic, ] { [ | \ italic, ] ] { [ | \ italic, ] { [ | \ itali