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Heraldic Crest of Takoradi Technical University- An Artistic and Esoteric Approach

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Abstract



Deciphering the fascinating history behind a redesigned Takoradi Technical University's (T.T.U) heraldic crest as well as the secret meaning of its symbols and colours make it significant in heraldry. This heraldic crest has been a depiction of forms such as cogwheel, open book, sea, Adinkra symbol, fonts and colours. This article, therefore, aims to underline the hidden secrets and meanings embodied in the redesigned and sculpted heraldic crest of Takoradi Technical University after Government's conversion of Polytechnics in Ghana into Technical Universities. Through intrinsic and conceptual statements, the paper projects the artistic and esoteric features of Takoradi Technical University's heraldic crest in an augmentation to commemorate the institution's sovereignty as a symbol of excellence in technical and vocational education. The ramification of newly created institutional heraldry revealed a symbolism crowning the promotion of industrialisation and economic development for the Western Region and Ghana in general through manpower training and action research. This is intended to provide support

to industry and commerce in the areas of human resource and information development.

Keywords: Ideation, Textile Regalia, Akuapem State, Royal Palanquin, Umbrella

Introduction

Among every institution, heraldry is synonymous with their values showing pre-eminence, authority and identity. Indeed, the artistic depictions that characterise the Takoradi Technical University's heraldic crest are a hallmark of the institution's excellence in technical and vocational education. In view of this, Micah and Donkor (2019, p.9) add, "Heraldry as crest has great thoughts on individual and the society through playful use of symbols and emblems".

To witness such thoughts from diverse views, heraldry has long-standing history over many centuries as Barreto (1992) hints that Heraldry, which first appeared in ancient Egypt, became especially important with the Western and Eastern Crusades. The coats-of-arms of the Knights of the Temple that are reproduced in this chapter were strongly influenced by Hebrew symbology. In support of this, heraldry came to mean the complex system of symbols and their arrangements that designate a person, family, institution, corporation or nation in the form that began in Europe in the 1100s CE. The main form of heraldic device in the European systems is the Coat of Arms. Others are the crest, badge, seal, flag and other insignia of any of the entities (Pido, 2018).

As justified by Brooke-Little (1983), Huffman (2016, para. 2) cites that "heraldry is the study of armorial bearings, otherwise generally known as coats of arms". In Brooke-Little's justification, these coats of arms could possibly link to the earliest known decorated shield that used hereditary devices centred on the shield as the one Henry I of England gave his son-in-law, Geoffrey of Anjou, when he knighted him in 1127 (Huffman, 2016). Relating to this context, heraldry was used originally to identify warriors on the battlefield and rapidly became symbolic representations of a specific family.

These symbolic representations of a specific family as genealogy has stood the test of time as some have developed into institutional heraldry. It is evident from Leino's (2016) argument that heraldry has been used to identify people, places and various corporate entities for centuries, although its origins are not well known. As illustrated in Figure 1 of official blazon of Ghana, institutional

heraldry on the other hand has been an entitlement for organisational entities to be recognised in a particular way through symbols, colours and texts.



Figure 1: National Coat of Arms of Ghana (Source: Wikipedia contributors, 2020)

Eventually, symbolic representations relating to institutional heraldry sometimes can have both traditional and contemporary features of identities. From the article's standpoint, the dynamism of heraldry designs today has turned into contemporary logos and brands that exploit the historic and time-honoured designs of institutions in Ghana and beyond. In credence to Pettengill (2013), symmetry, banners and mottos, shields, and other design motifs can impart a stately, dignified look and feel. Figure 2 demonstrates a central element of the 900-year-old tradition of heraldry; the coat of arms was used to identify military units, towns, churches, families, individuals and companies. The traditional designs are still used today by many cities and universities worldwide, usually with guidelines to protect their use as trademarks, and often regulated by the official granting organization, municipal council or heraldic authority (Pettengill, 2013). In addition to some Ghanaian institutional logos with contemporary institutional heraldry, logo and identities as shown in Figures 3 and 4, Service (2014) situates institutional identity (which parallels corporate identity):

As the actual defined graphic standards and applications. Institutional identity determines how, when, where, why, and to whom our image (brand) is presented in various forms of media, through both print and electronic methods. It is these standards that interpret colours, fonts, applications, placement, messages, do's and don'ts (p. 7).



Figure 2: A typical classic coat of arms of Kingdom of England from (1509 to 1554) used by Henry VIII variant with Lion and Dragon with features of several distinct elements (Source: Pettengill, 2013)



Figure 3: Contemporary logos of institutions. (Source: Pettengill, 2013)



Figure 4: Some Ghanaian institutional logos (Source: Yahoo.com, 2020)

Barreto (1992, p. 456) cited Corbin (1978) that, "the symbols have the advantage in that they are inexhaustible and that their interpretation cannot be contained. They cannot be denied or discussed like logic". This article, therefore, aims to underline the hidden secrets and meanings embodied in the redesigned and sculpted heraldic crest of Takoradi Technical University after Government's conversion of Polytechnics in Ghana into Technical Universities. Through

intrinsic and conceptual statements, the article projects the artistic and esoteric features of Takoradi Technical University's heraldic crest in an augmentation to commemorate the institution's sovereignty as a symbol of excellence in technical and vocational education.

Semiotic Theory and Heraldry

Subjecting these intrinsic and conceptual statements of features of Takoradi Technical University's heraldic crest for analysis, the authors saw semiotic theories of Charles Sanders Peirce (1857-1913) and Ferdinand de Saussure (1839-1914) cited by Yakin and Totu (2014) as theoretical and analytical tools for this study. The nomenclature of semiotics displays three subgroups specifically regarding its basic settings of reception and perception namely semantics, pragmatics and syntax (Svili**čić** & Maldini, 2013). Connotatively, the correlation of heraldry and these three subgroups of semiotic theory possesses signs and symbols (visual and philological) to create meaning. In other words, the visual elements in heraldry are coded with ideological and aesthetic messages. The philosophy and analytical involvement of semantics, pragmatics and syntax of semiotic theory are connected with Takoradi Technical University's (T.T.U) heraldic crest and its academic simplification of the crest appearance.

Semantics display of the T.T.U's heraldic crest falls within phonemic description of texts ascribe beneath the crest. The meaning and interpretation of words, signs, and sentence structure largely determine their comprehension. Kroeger (2018, p. 4) explains that "semantics is concerned with the inherent meaning of words and sentences as linguistic expressions, in and of themselves, while pragmatics is concerned with those aspects of meaning that depend on or derive from the way in which the words and sentences are used". Syntax in the context of semiotic and heraldry looks at the structure or form of expressions on the T.T.U's crest.

Grounding these semiotic theories by Peirce and Saussure, Yakin and Totu (2014) comparatively point out that:

The gist and primary focus of Saussure's theory is the principle that emphasized language as a system of sign, and besides language there are many other sign systems that exist in the world of mankind. However, in his opinion the system of linguistic signs or language is the most superior sign system compared to other sign systems that exist in the real world because it plays an important role in constructing reality.

Whilst the main principles containing Peirce's theory are the human mind and sign boundaries, the three-dimensional system (triadic/trichotomy) and the relativity regarding the three typologies or taxonomies of signs (icon, index and symbol) (p. 5-6).

It is therefore certain that the comparative statement by Yakin and Totu (2014) has significant concepts, that relate to the formation of heraldry as it deals with the meaning assigned to the symbols, characters and words on the crest.

Visual Content of T.T.U's Heraldry from Old to New Crest



Figure 5: Old crest and new crest (Source: Micah & Donkor, 2019)

Taking a critical look at these two crests, the visual content of these two heraldic crests guides the audience to deciphering and understanding the new T.T.U's heraldic crest. The visual content breaks down the elements and explains the variations and differences associated with the two crest. The values of the old and new T.T.U's heraldic crests are the same however, there are minor changes effected on the new crest. Comparatively by juxtaposing the new crest to the old one, it can be vividly seen that it has almost the same artistic features but the small cogwheel gracing on top of the open book of the old crest has now become the emphasis where the artists and designers placed the cogwheel boldly around the new crest.

Colours ranging from navy blue, yellow, red and white on the new crest are exactly the depictions of the old crest. The display of Adinkra symbol on each crest is the same but in the old crest, the sea wave takes a convex form beneath

the Adinkra symbol whereas the sea waves of the new crest takes a convex form beneath the Adinkra symbol. In a common disposition, both have the sea waves and the open books whereas the open books lie perpendicular on half radius of a centroid of the crests. The old crest has a yellow open book whilst the new crest has a white open book with lines appearing on the left and right sides on the leaflets of the open book. Looking at the bottom mantle with bottom banner of both crests have inscriptions in navy colour on yellow background. Again, all the crests have three outline rings in navy blue, yellow and red.

Design Brief and Approval

Design brief in this context served as the elements and principles of design that are required in designing the heraldic crest of Takoradi Technical University (T.T.U) (formerly Takoradi Polytechnic). The development of T.T.U's heraldry was based on the Takoradi Technical University's establishment in September, 2016, as a result of the government's policy to convert Takoradi Polytechnic, among five other Polytechnics, to the status of Technical University.

T.T.U (2016) spells out in its strategic plan that:

In effect, since April 1954, Takoradi Technical University (formerly Takoradi Polytechnic) has existed as a Government Technical Institute under the Ghana Education Service of the Ministry of Education. During that period, the institute offered programmes mainly at the Craft and Technician Certificate levels in commercial and technical subjects, awarding Royal Society of Arts (RSA) and City and Guilds of London, United Kingdom. However, in 1990, the Ghana Education Service took over the awards of the above-mentioned certificates. As part of the Ghana Educational Reforms which began in the 1980s, the Takoradi Technical Institute and five other similar institutions were upgraded by the Polytechnic Act 321 (PNDC Law 1993) to become part of the Ghana Tertiary Education System. The Polytechnics, per the law, began to offer Higher National Diploma (HND) programmers in the 1993/1994 academic year. These reforms mandated the polytechnics to compliment the role of the Universities to increase access to tertiary education for the training of middle and higher-level manpower. A Bill proposed by the Ministry of Education and considered by Cabinet of Government in 2014 was passed by Parliament as an Act in August 2016 with the assent of the President, converting some polytechnics into technical universities as full-fledged technical universities. In view

of that, the Takoradi Polytechnic Council adopted the name "Takoradi Technical University" which has been duly registered with the Registrar General's Department of Ghana (p. 1)

Designing brief was solving of design problem that established the requirements of the creative service undertaken by the designer or design team (Jones & Askland, 2012). Evans Kwadwo Donkor, Elijah Sofo, Ernest Doe Kujoji, Prof. Victor K. B. Micah and Dr. George Brako-Hiapa led the design team from both Sculpture Technology, Industrial Painting and Graphic Design Departments, Faculty of Applied Arts and Technology, T.T.U. Through the design brief, series of design concepts were developed on the computer with Corel Draw and Adobe Photoshop software as shown in the Figure 6 to Figure 13. Designing of the T.T.U's heraldic crest, firstly, took artistic conception that guided the choice of modifying the features of the old crest and the ways of incorporating technological and educational excellence instilled in the process of consolidating with design team. At a more advanced stage of the process, it was very necessary to coordinate the cogwheel as focal point of artistic conception of the new heraldic crest, as the former crest provided the design team with an appropriate platform as a source of inspiration. Figure 13 shows the final design approved by management of Takoradi Technical University.



Figure 6: Design One

Figure 7: Design Two



Figure 8: Design Three



Figure 9: Design Four

Figure 10: Design Five



Figure 11: Design Six

Figure 12: Design Seven



Figure 13: Design Eight - Final Design Approved

Intrinsic and Conceptual in Esoteric Interpretations

Fosu (2007) writes that:

Since the art sought the interpretation rather than the mere representation of exactness of the object produced, it resulted in a style of art that was characterised by stylisations, symbolisms, exaggerations and extreme distortions. This meant that every creative artwork was aesthetically appraised on the basis of the communicative symbolism unified within its type-form (p. viii).

Fosu's thoughts on art interpretation are considered from intrinsic and conceptual qualities on the general assessment of the creative work itself. Based on the semiotic theories of Charles Sanders Peirce and Ferdinand de Saussure, the study categorised the artistic and esoteric approach of T.T.U's heraldic crest into two namely intrinsic and conceptual values as ascertained by Fosu (2007) in his argument of aesthetics.

Intrinsic standpoint

Intrinsic value of T.T.U's heraldic crest took an appraisal by looking out for specific intrinsic qualities that create illusions, impressions, assumptions or feelings in the composition of heraldic crest. Surguladze (2013, para. 10) supports that one final thing to consider in art appraisal is its intrinsic value. Intrinsic value is measured by how unique, irreplaceable and sacred the work is. Even the most prestigiously designed or carefully crafted limited edition luxury timepiece is still only one of a series from a production line. Intrinsic value in this context reflects the experience of T.T.U's heraldic crest through an objective and descriptive analysis.

Table 1
Key features on T.T.U's heraldic crest

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Key features	Description
Cogwheel	A navy-blue gearwheel having teeth inserted into slots. It forms part of the outer layer of the heraldic crest. It has 12 slots of teeth arranged in a coordinated latitude and longitude which are imaginary lines drawn to achieve and locate the 12 slots on the round crest.
Adinkra symbol	"Ntesie" or "Mate masie" (literally, "I have heard and I have kept it") is a Ghanaian cultural symbol that is set in the centre of the crest represents wisdom, knowledge and prudence of taking into consideration what another person has said. The Adinkra symbol has a red and yellow colour. It is placed at the lower part of the crest.
Open book	A white and red-outlined colour with text of an open book set or sit on top of the Adinkrah symbol. In addition, the base of the open book meets the sea waves at upper half of the crest.
Sea waves	Sea waves have two colours; the colour of the sea is navy blue whiles the waves is in yellow stripes. It surrounds the Adinkra symbol at lower half of the crest. The sea waves have both convex and concave shaped forming the design.
Round-ringed shapes	The crest has three round-ringed shapes with navy blue, yellow and red outer lines. The first round-ringed shape is the cogwheel with 12 inserted slots. The second round-ringed shape is a yellow ring interwoven into parts of the sea waves and the Adinkra symbols. The last round-ringed shape is a red colour coordinating the open book and the Adinkra symbol.

Bottom mantle with inscriptions

This is a composition of fonts or inscriptions as the motto of T.T.U, "Nsa, Akoma na adwen ma mpuntu" (the hand, heart and mind). The fonts have a navyblue colour on a yellow background forming the bottom mantle of the crest. The yellow mantle has a navy-blue colour forming the outline of the bottom mantle.

heraldry

Colours in TTU's The composition of the heraldic crest has two domineering and patriotic palette colours namely navy blue and yellow and white as a third colour gracing the crest.

(Source: Field study, 2020)

Table 1 shows the key features and description on T.T.U's heraldic crest that have been intrinsically appraised. These artistic features found on the heraldic crest are vital in modern heraldry by maintaining the values, traditions and attributes of the institution as ascertained by Child (1976) that the art and science of heraldry is certainly in evidence in modern life, it fills the need for display and tradition in a unique way.

Conceptual standpoint

In conceptual value of T.T.U's heraldic crest, a subjective and esoteric interpretative analysis were used to break down the artistic features on the T.T.U's heraldic crest as shown in Figure 14 to 21. The conceptual beauty of TTU's heraldic crest gives credence to Fosu (2007) that conceptual beauty appraises the aesthetic appreciation of the harmonious blending of communicative message expressed within the type-form of a creative work. It is a strict interpretation of nature, an object, a performance, event or a scene. It is beauty with content, interpretive. It is beauty inside out. It is enjoyable because the conceptual relevance of the functional and philosophical contents possesses profound symbolic dimensions that satisfy psychological and emotional feelings. It has a contact with the interactive relationship between a concept and the expressive form releases a deep inner sense of emotional sentiment. In its compositional expression, formal elements are arranged as integral component part of the thematic content. The esoteric interpretation of conceptual values on T.T.U's heraldic crest is a build-up of Micah and Donkor's (2019) research article titled Redesigning and sculpting of Takoradi Technical University's heraldic crest.

Cogwheel

Rankin (2020, para. 1) shares that cogwheel is a mechanical part used in machine assemblies. It is also known as a gear and is an essential part of many common devices, including automotive transmissions. The body of the gear rotates just as a wheel does, and its outer edge is lined with protuberances called teeth or cogs; hence the name cogwheel. These cogs allow the gear to transmit energy and direction to the other gears in the machine assembly. It is a basic part that allows much more elaborate machines to operate, and as such is often applied metaphorically to objects or people with similar functions.

Based on the physical interpretation as ascribed by Rankin (2020), the cogwheel, relative to the traditions and values of T.T.U, interprets the excellence in technical and vocational education in manpower training and action research. It also serves as the brain of the institution whereas the institution is the engine machine. This cogwheel propels and drives the institution through the academic excellence by giving opportunity to people within the community and beyond to acquire skills and knowledge within the technical and vocational education. Numerology of twelve is very vital in understanding the microcosm of creation that signifies completion. Around the cogwheel is dozen slots as the propelling teeth of rotation. The 12 slots represent the 12 realms of cardinal directions on the cogwheel that symbolizes the north, south, east and west of the sky. Each portion ruled by a personification, a god, a divine being, a teacher, a prophet or a son of the sun. These 12 realms draw the source of power for the institution's acceleration, speed and direction of academic excellence.

David (2020) confirms that the number twelve signifies faith, or the things of love and the derivative faith in one complex, might also be confirmed by many passages from the Word, as from the twelve sons of Jacob and their names, the twelve tribes of Israel, and the Lord's twelve apostles; but concerning these of the Lord's Divine mercy hereafter, especially in Genesis 29 and 30. In time, twelve is an integral part of time. The solar year is composed of twelve lunar months. The zodiac of ecliptic contains twelve constellations that divide the night and day into twelve parts. Throughout the whole day (24 hours), night consists of twelve hours, and day-time consists of twelve hours. Thus, one can see that time seems to be bounded by twelve. There were twelve minor Prophets: Hoshea, Yoel, Amos, Obadiah, Yonah, Micah, Nahum, Habakkuk, Zephaniah, Haggai, Zechariah, Malachi (David, 2020).

Zagata (2017) supports that number 12 features prominently in the Bible. The Old Testament Book of Genesis states there were 12 sons of Jacob and those 12 sons formed the 12 tribes of Israel. The New Testament tells that Jesus had 12 apostles. According to the Book of Revelation, the kingdom of God has 12 gates guarded by 12 angels. The number 12 is displayed in many other contexts, such as the 12 months of the year and the 12 constellations of the zodiac namely Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpius, Sagittarius, Capricornus, Aquarius and Pisces.

In geography, Wellman (2013) relates that 12 geographic realms form the spatial framework: Europe, Russia, North America, Middle America, South America, Sub-Saharan Africa, North Africa/Southwest Asia, South Asia, East Asia, Southeast Asia, Austral Realm and Pacific Realm. This is situated on the purpose of dividing the world into these realms as to organize the world geographically into regions based on land and human geography.

In the context of designing the heraldic crest as in Figure 14, the purpose of choosing the cogwheel as the prominent artistic feature for T.T.U's heraldic crest was based on these aforementioned philosophies.

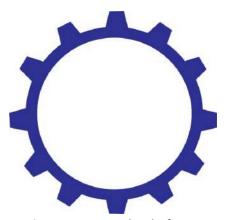


Figure 14: Cogwheel of T.T.U

Adinkra symbol

Korankye (2017) introduces that Adinkra symbol has three levels of meaning, the literal meaning, the physical meaning and the metaphysical meaning. The literal meaning is the direct meaning of the symbol as it is pronounced. The physical meaning is the extension of the literal meaning to society. Metaphysical

meaning is the extension of the literal and physical meaning to the Divine. The Adinkra symbol found on T.T.U's heraldic crest is "Ntesie" or "Mate masie".

The esoteric significance of Adinkra symbol "Ntesie" or "Mate masie" in Figure 15 is placed at the centre of T.T.U's heraldic crest that stands for the institution's wisdom, knowledge and prudence of taking every matter into consideration what has happened in the university community on the notion of deep wisdom comes out of listening and keeping what is heard. Adinkra symbol, again, connotes a spiritual or sacred reminiscent bond between the traditional customs of the land, community and the institution that shared a mutual bond across time. In addition, it serves as a repository of Ghanaian cultural values that the institution possesses by imparting these values to the university community. It symbolises the mark of individual contribution from the hierarchical efforts in the development of the institution through technical and vocational education, in manpower training and action research intended to provide support to industry and commerce in the areas of human resource and information development.

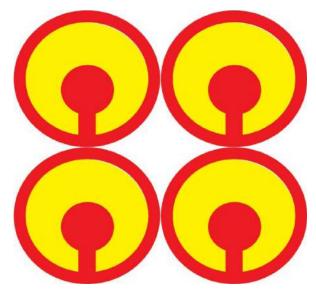


Figure 15: Adinkra symbol "Ntesie" or "Mate masie"

Open book

Book in general is the symbol of knowledge and memories. Books also communicate and express a person's desires and ideas. Representation of open book in T.T.U's heraldic crest is based on its academic activities as being technical and vocational education in manpower training and action research intended to provide support to industry and commerce in the areas of human resource and information development.

An open book as shown in Figure 16 with white and red-outlined colour set on adinkrah symbol is a vehicle that records and perpetuate timeless truth, wisdom and knowledge for the benefit of both current and future generations. Again, the book in the crest is a permanent remembrance of thoughts, theory and practice that have been passed from great leaders of the institution throughout the changing ages of time. The written pages symbolize the unwritten future and events that have not yet happened, reminding the institution, therefore, that all options and outcomes remain open. It also represents a destiny that is yet to be fulfilled; a story yet to be told, decisions and choices yet to be made; dreams still to be pursued and adventure still in progress. In a sense of educational activities, it always reminds the institution in envisage of lifelong learning to promote industrialisation and economic development for the Western Region and Ghana in general. Moreover, it represents the programmes of learning that institution strives to provide for its students so that they may continue to learn and develop throughout their lives.

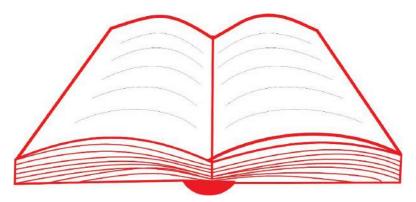


Figure 16: Open book

Sea waves

T.T.U as an educational institution is located near the seashore of Takoradi. The sea with its daunting width and depth in the heraldic crest simply stands for life as it is acknowledged that water is life. It may be quite calm, but it becomes raging and even deadly in an instant, with the waves representing the sudden obstacles life throws everybody's way.

Figure 17 shows the sea waves of T.T.U's heraldic crest where the blue sea with yellow wavy stripes represents the location of the institution near coastal area of Sekondi-Takoradi metropolis in the Western region of Ghana. It connotes the institution's pride in natural endowment of resources by showcasing its treasures in oil and gas, fishing and harbour as industrial and commercial centre for business. With the institution's day-to-day activities in all areas of development, the sea waves is a sign of caution as being productive also comes with challenges but there is light at the end of the tunnel.



Figure 17: Sea waves

Round-ringed shapes

Wirstiuk (2020, attesting to the meaning of circles, asserts that:

Throughout history, the circle has remained a symbolic shape that transcends geography, language, culture, and time. Many people believe that the circle represents concepts like eternity, femininity, wholeness, and the cycle of life. In addition, the sun and the moon, which have captured the devoted attention of scientists, astronauts, poets, astrologers, and many others, are both circles (para. 1).

The labyrinth surrounding T.T.U's heraldic crest has been a path of educational journey through life on the path toward unity and oneness. The red ring circle in Figure 18 symbolizes the institution's hard work and its sacrifices that underlies success in academic excellence and all its endeavours in life. The red round-ringed circle belongs to all cultures of the human race that the Institution welcomes.

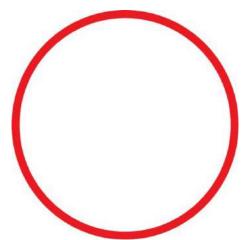


Figure 18: Red round-ringed shape

The rich yellow circle in Figure 19 encapsulates wealth that results from the application of the skills and knowledge acquired through the unique education at the institution. It illuminates the institution's brilliance and integrity through its rich ideas and programmes it offers to any individuals or entities seeking for academic glorification.

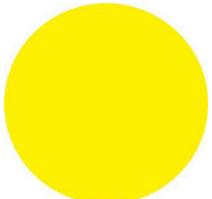


Figure 19: Yellow circle shape

Bottom mantle with inscriptions

A mantle is a symbol of sovereign power and is generally reserved for royalty. In some cases, its use has also been granted to other nobles, in recognition of particular merits. In ordinary rendering, the mantle is usually crimson and lined with ermine (Wikipedia contributors, 2020). Fonts as inscriptions on the bottom mantle confirm Taylor (2020, p. 1) that "the competent use of typography commands the attention of the audience and communicates a key concept and eventually motivates them to react". These arguments tell the fact that inscription on the bottom mantle of T.T.U's heraldic crest holds deep philosophical statements.

The bottom mantle with Akan (Fante) word or inscriptions captioned "Nsa, Akoma na adwen ma mpuntu" (the hand, heart and mind) in Figure 20 literally, skills and knowledge engender development as the institution's motto symbolises the University's identity and values that are imbued with rich Ghanaian values. A symbol promotes the heritage of Ghanaian culture through excellence in technical and vocational education.



Figure 20: Bottom mantle with inscription

Colours in T.T.U's heraldry

Colours in general have effects on a majority of people and it is an incredibly valuable expertise that designers can master and offer to their clients (Chapman, 2010). The myths and truth concerning the colours in T.T.U's heraldic crest has a functional purpose of communication through natural (intrinsic) and psychological (conceptual) means.

The navy blue colour found in T.T.U's heraldic crest symbolises honesty and trustworthiness of its members and the nature of global world of technological education and training undertaken at the institution. The yellow colour seen in the heraldry also symbolises the prestige of the institution in technical and vocational education as the yellow colour in T.T.U's heraldry indicates honour and loyalty. It also unifies the university community as one by bonding and

connecting everybody within it. The red colour symbolises energy, strength, power, determination as well as passion, desire, and love that the university's forefathers shared through academic rigours, hard work and sacrifices laid down for the success of academic excellence and all its endeavours.

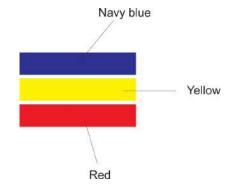


Figure 21: Sample of Colours on T.T.U's heraldic crest

Conclusion

The fascinating history behind the redesigned Takoradi Technical University's heraldic crest as well as the meaning of its symbols and colours are very significant in heraldry. The heraldic crest of Takoradi Technical University (T.T.U) has been a depiction of forms such as cogwheel, open book, sea, Adinkra symbol, fonts and colours. The essence of heraldry is for effective identification and communication purposes. The ramification of newly created institutional heraldry revealed a symbolism crowning the promotion of industrialisation and economic development for the Western Region and Ghana in general through manpower training and action research intended to provide support to industry and commerce in the areas of human resource and information development. It is undeniable fact that T.T.U's heraldic crest also acts as a powerful motivating force and a means of encapsulating secrets of philosophical significance relating to the institution's purview, individuals and the society as well. Heraldry, as an artistic and symbolic element, needs to be given utmost attention as its semiotic concepts imbue meaningful and striking beauty that tells a story. The underlying artistic and esoteric meanings in designing or redesigning of heraldry must not only be seen as a symbol of sovereignty or prestige but also natural and psychological values that needs to be deciphered and understood by people.

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