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APPLIED LINGUISTICS OF ABSTRACTION IN TEACHING DESCRIPTIVE MECHANICS OF TEXTILE INDUSTRIES

The purpose for this article aims to regulatory increased and an abstraction approach in philosophy ontology descriptive mechanics tests teaching descriptive mechanics of the textile industry from processing facilities owned by public universities was initiated of applied linguistics. The textile industry has led the world into and is leading the movement toward global manufacturing; there was a flurry of philosophy ontology abstraction in teaching descriptive mechanics of textiles in Egypt.

Methodology solving the problems identified in philosophy ontology abstraction in teaching descriptive mechanics of textiles, these tests required the development of new descriptive mechanics education, Rephrasing the detailed description of the curriculum for teaching textile mechanics, stripping it of any excess content, and teaching it easily so assessment tools and the use of systems thinking and dialogue with the community, industry, and regulators.

Results: The abstract teaching method of these tests allowed the development of new descriptive mechanics teaching evaluation tools, the use of systems thinking, and dialogue with society, industry, and regulatory authorities. A case study of the beneficial use of these tools is presented as an example of how a philosophical abstraction science approach to teaching meta-dynamics in the textile industry can improve productivity and production resulting from cooperative behavior of stakeholders.

Conclusions: Through this study, which this period of time needs of applied linguistics, with the increase in regulatory controls and the beginning of the abstract approach in ontological philosophy and descriptive mechanics was developed tests for teaching descriptive mechanics for the textile industry from processing facilities owned by public universities.

Recommendations: there is a need to generalize and expand in reformulating the curricula and teaching methods according to this study.

Keywords: abstraction, education, applied, description, dynamics, textiles, linguistics, machines.

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ПРИКЛАДНА ЛІНГВІСТИКА АБСТРАКЦІЇ У ВИКЛАДАННІ МЕХАНІКИ ТЕКСТИЛЬНИХ ВИРОБНИЦТВ

Метою цієї статті є посилення нормативного та абстрактного підходу в тестах описової механіки онтології філософії, що викладають описову механіку текстильної промисловості на обробних підприємствах, що належать державним університетам, ініційовано прикладною лінгвістикою. Текстильна промисловість привела світ і веде рух до глобального виробництва; у викладанні описової механіки текстилю в Єгипті спостерігався шквал філософської онтологічної абстракції.

Методологія вирішення проблем, визначених у філософській онтологічній абстракції у викладанні описової механіки текстилю, ці тести вимагали розробки нової освіти з описової механіки, перефразування детального опису навчальної програми для викладання механіки текстилю, позбавлення від будь-якого зайвого змісту та викладання легко тому інструменти оцінювання та використання системного мислення та діалогу з громадою, промисловістю та регуляторами.

Результати: абстрактний метод навчання цих тестів дозволив розробити нові інструменти оцінювання навчання описової механіки, використовувати системне мислення та діалог із суспільством, промисловістю та регуляторними органами. Дослідження корисного використання цих інструментів представлено як приклад того, як підхід філософської абстракції до викладання

метадинаміки в текстильній промисловості може підвищити продуктивність та виробництво в результаті спільної поведінки зацікавлених сторін.

Висновки: Завдяки цьому дослідженню, яке потребує прикладної лінгвістики в цей період часу, зі збільшенням нормативного контролю та початком абстрактного підходу в онтологічній філософії та описовій механіці, розроблені тести для викладання описової механіки для текстильної промисловості на переробних підприємствах, що належать державі університети.

Рекомендації: необхідно узагальнити та розширити переформулювання навчальних програм та методик навчання за даним дослідженням.

Ключові слова: абстракція, освіта, прикладна, опис, динаміка, текстиль, лінгвістика, машини.

Introduction

Applied Linguistics enhancement "ALE" is an interdisciplinary field of textiles industries which identifies, investigates, and offers solutions to language-related real life problems. Some of the academic fields related to applied linguistics are education, research of textiles industries, and information science, applied linguistics the abstract approach research methodology provides a pathway for researchers to conduct their research. It provides a pathway for these researchers to formulate the problem and objectives and present results from the data obtained during the study. Furthermore, the "Research design and methodology" of this abstract approach shows how the final results of the study will be obtained in order to achieve the objectives of the study. Therefore, this paper describes the research methodology used in the abstract approach research process. [1, 2, 3].

It includes the methodology of the research, from the research strategy to the dissemination of the results. Applied linguistics enhancement "ALE" is a concept in textiles technology language acquisition. Textiles technology coined the term to cover techniques used by researchers to make salient selected features of a language for students such as word order, parts of words that express tense, agreement and number for example, accents, idioms and slang. [4, 5] these techniques of textiles Technology aim to draw attention to aspects of a language that have hitherto seemed to have made insufficient impact on the learner. This need not necessarily involve making learners of textiles technology consciously aware of the researcher's or teacher's intentions. Although applied linguistics enhancement "ALE" of textiles technology was conceived of as a research tool, the term can also be used to describe techniques deliberately or instinctively used in textiles technology language teaching and also in the way parents (again instinctively) talk to their children as also the way people alter their speech when talking to non-native speakers who seem to have difficulty in communicating. Applied linguistics enhancement "ALE" of textiles technology may figure as a deliberate strategy in teaching methods but it has always been present implicitly in standard teaching practice.

This includes the research strategy, abstract research design, abstract research methods, research areas, data sources such as primary and secondary data sources, population considerations, sample size determinations such as determining the sample size for questionnaires and abstract workplace exposure measures, collection of workplace observation data, data through questionnaires Discusses desk research with summary data collection methods, including primary data collection methods such as collection, data obtained from expert opinion, abstract workplace exposure measures, pre-testing of data collection tools, secondary data collection methods, data used (quantitative data analysis, qualitative data analysis methods, data analysis software, quantitative data reliability and validity analysis, data reliability, abstract reliability analysis, validity, data quality control, inclusion criteria, ethical considerations, dissemination of results and approaches to their use). Qualitative and quantitative abstract research methods are generally employed to achieve the objectives of abstract research [4, 5, 6]. In this study, these mixed strategies were used to obtain data from all aspects during the study period. Thus, the objective of this methodology is to achieve the abstract research plan and goals devised by the researcher." 'Abstract Theory' An abstract approach to teaching descriptive mechanics in the Textile Industry Its primary meaning is the conceptual process by which general rules and concepts are derived from the use and classification of concrete examples, literal ("realistic" or "concrete") symbols, first principles, or other methods [9, 10, 11]. The abstract approach to teaching fiber descriptive mechanics is an outcome of this process. This concept serves as a common noun for all sub-concepts, linking all related concepts together as a group, field, or category. [10, 11]. The concept abstraction approach in the teaching of textile descriptive mechanics is formed by filtering the information content of concepts and observable phenomena and selecting only those aspects that are relevant for a particular purpose [6]. For example, by abstracting textile descriptive mechanics into a more general idea of textile descriptive mechanics, only information about the general attributes and behaviors of textile descriptive mechanics is selected, excluding but not eliminating other phenomenological and cognitive features in the teaching of that particular textile descriptive mechanics. [9, 12]. In the distinction between types and tokens, a type (e.g., "teaching the descriptive mechanics of textiles") is more abstract than its token (e.g., "descriptive mechanics of textiles"). Abstraction in secondary use is a material process. [3, 6, 13, 14].

Physicality of Mechanics of Textile Industries

The physical-mechanical object of textile (to which concepts and words can refer) is considered concrete (not abstract) when it is a particular individual occupying a particular place and time. However, in the secondary sense of the word "abstract," this object of the physical mechanics of the textile industry can be responsible for materially abstract processes. In other words, these physical marks functioned as material abstractions of the materially abstract process of accounting, using conceptual abstractions (numbers) to convey their meaning [3, 15, 16,]. An abstraction can be defined as something that does not exist in reality or only as a sensory experience, such as a red color or a geometric shape. However, this definition suffers from the difficulty of determining what is real (i.e., what things exist in reality). For example, it is difficult to agree on whether geometric deficiencies, weft insertion methods, shafts used, or concepts such as Dobbies or jacquards are real, abstract, or both. One approach to resolving these difficulties is to use predicates as a generic term for whether a thing is real, abstract, concrete, or has a particular property (e.g., good)

or a variety of properties. Then the question of the properties of things becomes a proposition about the predicates of the descriptive mechanics of the geometric omissions of the textile industry, and this proposition is to be evaluated by the machine designer. [8, 17, 18].

Materials and methods

Sources to address the main research objective [2], an abstract approach to teaching the descriptive dynamics of the textile industry, this study used qualitative and quantitative methods and combined primary and secondary sources. Qualitative data corroborates the analysis and results of the quantitative data. Because the researcher utilized both qualitative and quantitative data in the data analysis, the results obtained were triangulated. The study area, data sources, and sampling techniques are described in the following papers. [19, 20].

Second-year student, textile spinning department, Faculty of Applied Arts, Beniwayaf University, Egypt. Third-year student, textile spinning department, Faculty of Education and Technology, Suez University, Egypt. Sophomore, department of textiles and spinning, Faculty of Applied Arts, Beniwayaf University, Egypt. A third-year student at the department of textiles and spinning, Faculty of Education and Technology, Suez University, Egypt. There are also a number of representative educational industry clusters in the surrounding area. In order to identify students in representative textile industry clusters, industry sectors with potential from education were investigated based on random and purposive sampling. Included in the data were students in the textile manufacturing industry. A total of 36 students from the focus area of public universities completed the survey quiz.

Applied linguistics of the textile machinery systems described is available in government and private factories. Validity, as once defined, is a measure that makes a variable appears to measure reasonably, a subjective judgment that the instrument measures what it purports to measure in terms of relevance [8]. Therefore, in this study, the researchers ensured that uncertainty was eliminated by using appropriate language and concepts to enhance clarity and general conformity when developing the measuring instrument [18]. In addition, the researchers' "lead author," an occupational health professional who teaches safe work and ergonomics, submitted the measuring instrument to the study to ensure its validity and to determine if the instrument could be considered valid at face value. Prior to developing the instrument, the researchers in this study conducted a review of the literature on curriculum and instruction, compliance with occupational health and safety requirements, and data collection methods. In addition, a sampling survey conducted prior to this study allowed the researchers to avoid uncertainty regarding the content of the data collection instruments. A thorough expert review of the survey instrument ensured that all concepts relevant to this study were included and that the instrument was complete [21].

Teaching Approved

Educational permits were obtained from Kaferelsheikh University, Egypt; the Faculty of Applied Arts, Beni Sweiaf University, Egypt; and the Faculty of Technical Education, Suez University, Egypt. Official documents were issued by Kaferelsheikh University, Egypt. The purpose of the study was explained to the subjects. Informed consent was obtained from each participant.

Dissemination and Utilization of the Results

The results of this study will be presented at the Faculty of Applied Arts, Beniswayaf University, Egypt. They will also be presented at the Faculty of Technical Education, Suez University, Egypt. The results of this study will be communicated to the manufacturing industry in Egypt. It will also be presented in advance at the Faculty of Technical Education, Suez University, Egypt. The results of this study will be published in Research Gate and Google Scholars and will also be made available online. For this purpose, the paper will be published and disseminated worldwide.

In philosophical terms, abstraction is a geometric thought process in which ideas are distanced from their objects. It is distancing oneself from the object. An idea, however, is [20]

Applied linguistics of abstraction textile engineering scientists use abstraction to create models that can be used and reused without having to rewrite all the program code for new applications for each different type of loom. They communicate their solutions with weaving machines by writing source code in a certain textile industry language that can be translated into machine code that can be executed on different types of weaving machines. Abstraction allows the program designer to decouple the framework (the categorical concepts associated with the computational problem) from the specific instance that implements the details [3]. In other words, program code can be written to rely on the categorical concept of the solution rather than the specific details of the supporting application, textile industry operating system, or hardware. Solutions to problems can be integrated into the system framework with minimal additional work [18, 19]. This allows programmers to leverage the work of other programmers, requiring only an abstract understanding of the implementation of other programmers' work, independent of the problem it solves.

Applied linguistics of abstraction geometry shedding mathematical abstraction is the extraction of the underlying structure, patterns, or properties of a mathematical concept or object, and the reality to which it may have originally been connected. It is the process of removing dependencies on objects in the world, removing geometric shapes, generalizing them for wider application, or matching them among other abstract descriptions of equivalent phenomena [3, 8, 16].

Applied Linguistics of Abstraction "ALA" of textiles technology techniques for descriptive mechanics of textile industries include**:**

- In teaching textiles technology, avoiding vowel reduction typical of rapid or casual speech;
- Slowing down the rate of speech of textiles technology**;**
- In teaching textiles technology using exaggerated stress and intonation;

- In teaching textiles technology extensive repetition of words and phrases;
- Less pre-verbal and more post-verbal modification in in teaching textiles technology**;**
- In teaching textiles technology use of gestures, text enhancement such as boldface;
- In teaching textiles technology Underlining and other attention-catching textural techniques such as boldface, uppercase letters, colour-coding, etc**.**

ALE in teaching textiles technology includes use of traditional techniques to teach grammar and usage for descriptive mechanics of textile industries in teaching textiles technology distinguishes external input enhancement from internal input enhancement with the former referring primarily to techniques used in the deliberate teaching of a language and the latter employing ordinary events or situations **.**

The advantages of applied linguistics abstraction in mathematics include, reveals deep connections between different areas of mathematics. Known results in one field can suggest conjectures in another related field of geometry. Geometry shedding a technique or method from one field can be applied to prove a result in another related field.

Applied linguistics of geometry shedding can generalize patterns obtained from one mathematical object to other similar objects of the same class.

The main drawback of abstract geometry is that abstract geometry concepts are difficult to learn and require a certain degree of mathematical maturity and experience to be able to absorb.

Probability Theory Mechanics of Geometry Shedding

Most introductory probability theory books deal separately with discrete and continuous probability distributions; Mechanics of geometry shedding covers discrete probability distributions, continuous probability distributions, and mixed probability distributions of both. Probability theory is a branch of mechanics as mathematics concerned with probability [21]. Applied linguistics although there are several different interpretations of probability, probability theory deals with the concept in the mechanics of geometric shedding in a rigorous mathematical manner by pushing it through a set of axioms. These axioms usually formalize probability in terms of a probability space, which assigns a measure that takes a value between 0 and 1, called a probability measure, to a set of outcomes, called a sample space. The dynamics of geometric omissions any given subset of the sample space is called an event. Central subjects in probability theory include discrete and continuous random variables, probability distributions, and stochastic processes.

Junk knowledge; most of what we read is junk and will have little value a year from now. Abstraction Education expired knowledge is disposable; we consume it every day. Abstraction education timeless or long-term knowledge is that which maintains or increases its value over time [3, 22].

Short-term, expired knowledge, whether it is a question a startup asks at a conference or a company's quarterly performance, has little context unless it is combined with the long-term knowledge of abstraction education. If we ingest more long-term knowledge by reading good books, we can better determine which abstraction education. [3, 10, 23].

Applied linguistics of abstraction education Long-term knowledge versus expired knowledge:

- Expired knowledge is better than junk knowledge. It is topical and up-to-date knowledge, and therefore, it captures our attention.
- Long-term knowledge, which is abstract teaching, is harder to find because it is less tangible and requires a keen eye. Long-term knowledge has no expiration date.
- We forget about useless information.
- We consume a great deal of disposable information every day. Reading the news and social media fills our brains with information we don't need.
- This includes memories of the past that are no longer useful. Abstraction education too much information clouds judgment and decision making [7, 12].

Results

The research design is intended to provide an appropriate framework for the study of applied linguistics. A very important decision in the research design process is the choice regarding the research approach, since it determines how the relevant information of the study will be obtained. In this study, a mixed-method approach was employed. The first part of the study consisted of a series of structured abstracted educational quizzes (management, employee representatives, and industry technicians) and semi-structured interviews with key stakeholders from the participating organizations (government agencies, ministries, and industry). In addition, interviews were conducted with employees to learn how they felt about health and safety in the workplace, and field observations were conducted at selected industrial sites [3, 10, 23]. Therefore, a descriptive research design was employed in this study to agree on the impact of occupational health and safety management systems on employee health, safety, and property damage in the selected manufacturing industries. [6, 12, 13, 14] stated that descriptive research depicts an accurate profile of a person, event, or situation. This research design provides the researcher with a profile that describes the relevant aspects of the phenomenon of interest from an individual, organizational, and industry-oriented perspective. Thus, this research design allowed the researcher to collect data from a wide range of respondents on the impact of abstraction education in the Egyptian textile industry. And this helped the researcher to analyze the responses obtained on how it affects the textile industry in the manufacturing workplace. The overall design and flow process of the study is described.

Shedding is the process of dividing the warp yarn into two parts and creating enough space between them to allow the weft yarn to pass uninterrupted from one side of the loom to the other. Picking is the process of moving the pick (weft yarn) from one side of the loom to the other. On rapier looms, picking is done from both sides. On rapier

looms, however, picking is done from only one side of the loom (generally the left side). There are several methods of picking. Rapier is the most traditional picking method and is still used in the industry today. The following picking systems are used on rapier looms [1, 10, 15] Applied Linguistics of Abstraction "ALA" Science is an image of the known at the same time for descriptive mechanics of textile industries are:

1) The souls of the scholars are knowledgeable in action, and the souls of the educated are knowledgeable in power, and education is the manifestation of what is in power into action.

2) The universal soul is actually knowledgeable, and the partial soul is powerfully knowledgeable, and every partial soul is more known and created, so it is closer to the universal soul in resemblance to it, and becomes its own.

How many movements of descriptive mechanics of textile industries there are six types, the first of which is the movement of transition, which is of two types: either the movement of the entire body from one place to another, or the movement of its parts, such as the ark and the millstone?

The second is the movement of the universe, the third is the movement of corruption, the fourth is the movement of asthma, the fifth is the movement of deficiency and wear and tear, and the sixth is the movement of transformation, which is of two types: Either In the body, it is like color, and in the soul, it is like anger, contentment, knowledge, and ignorance.

A cross-sectional view of a flat loom with a cam opening mechanism is shown in figure 1, 2, where two opening cams control two healds via treadle levers. The ends of the treadle levers are connected to the healds by ropes and links. Each treadle lever has one treadle bowl (pulley), which actually remains in contact with the shedding cam [3, 10, 23]. In the case of plain weaves, the two opening cams are positioned with a phase difference of 180°. Thus, when one cam pushes the treadle ball downward, the other corresponds to the upward movement of the other treadle ball. The upward movement of the herd is activated by a roller reversing mechanism positioned above the loom. Figure 1 *(a,b)* shows another diagram of the cam opening system and roller reversing motion [1, 10, 15]. *(α1 + α2)> α.* Indistinct shed and Distinct shed.

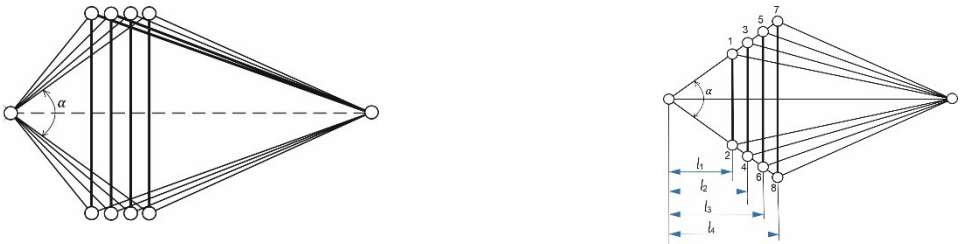


Figure 1. (a,b) Indistinct (unclear) and distinct (clear) sheds

Applied linguistics in the preceding the section of weaving machine, it has been discussed that higher vertical movement is required for the back heald so that distinct shed is formed. However, effective length of the treadle lever is shorter for the back heald. Thus, if the lift or throw of the cams controlling the back and front heald is same, higher vertical movement will occur for the front heald. This is just the opposite of the actual requirement [14]. To overcome this problem, cam which is controlling the back heald possesses higher lift as compared the cam which is controlling the front heald [1, 10, 15].

Let us consider the following parameters as shown in figure 2.

x is the distance between the fulcrum point of treadle levers and centre of treadle bowl.

y is the distance between the centre of treadle bowl and tip of the treadle lever tied with the back heald.

b is the distance between the front and back heald.

a is the distance between cloth fell and front heald.

h1 and h2 are the lifts of the front and back healds respectively.

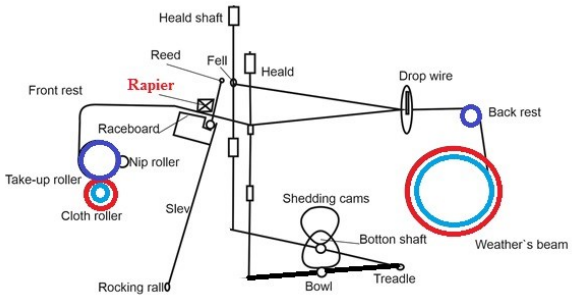


Figure 2. As Example of Cross-sectional view of loom

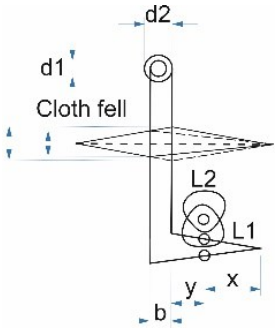


Figure 3. Lift of the cams and movement of the healds

The lift of a heald is equal to the movement of the tip of the corresponding treadle lever. Now, applying the concept of similar triangles [1, 10, 15]. We can write

$$\frac{h_1}{L_1} = \frac{x+y+b}{x} so\ , L_1\ \frac{h_{1x}}{x+y+b}\ and\ \frac{h_2}{L_2} and\ \frac{h_2}{L_2} = \frac{x+y}{x}\ \text{so}\ , L_2 = \frac{h_{2x}}{x+y} \quad (1)$$

Therefor: $$\frac{h_2}{L_1} = \frac{(x+y+b)}{(x+y)} x\ = \frac{h_2}{h_1} \quad (2)$$

At the front side of the shed, $\frac{h_2}{L_1} = \frac{(a+b)}{a}$ $so \frac{h_2}{L_1} = \frac{(x+y+b)}{(x+y)} x = \frac{a+b}{a}$ (3)

The above equation has two components, and in both components the numerator is clearly greater than the denominator. Thus, the value of L2 is significantly greater than the value of L1. This means that the lift of the cam controlling the back heald is significantly greater than the lift of the cam controlling the front heald [1, 10, 15].

The shaft with the reversing roller moves clockwise and counterclockwise to control the movement of the heald [21]. The angular motion of the shaft during shading is constant. However, the backward herd should have a higher vertical movement than the forward herd. This is accomplished by using two reverse rollers of different diameters in figures 4 and 5. The roller with the larger diameter is connected to the back heald and vice versa. Since the linear motion (angular motion x radius) of the reversing roller is equal to the vertical motion of the corresponding heald, the following equation can be written [1, 10, 15].

$$\frac{h_2}{L_1} = \frac{d_2}{d_1} \frac{(a+b)}{a} \quad so \frac{L_2}{L_1} = \frac{(x+y+b)}{(x+y)} x = (\frac{d_2}{d_1}) \tag{4}$$

A simplified geometry of the shed is shown figure.

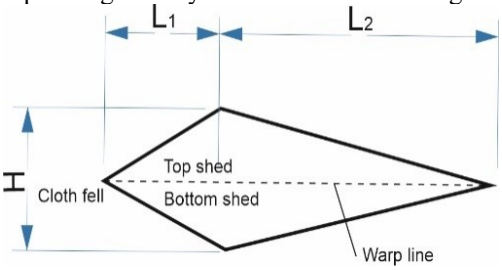


Figure 4. Applied linguistics geometry of shed

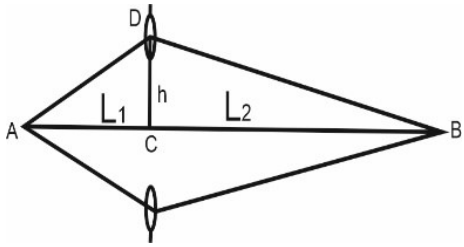


Figure 5. Warp strain during shedding

The main shed parameters are as follows:

• L 1: length of the front shed

• L2: length of the back shed

• H: shed height

When the heald is on the warp line (when the heald is horizontal), the path taken by the warp is the shortest. However, when the heald moves away from the warp line, the warp takes a longer path [14]. Thus, the warp will stretch, which must be compensated for either by warp elongation or by adjusting the yarn delivery system [3, 10, 23]. Longer backshed lengths result in less yarn elongation and are suitable for weaving delicate yarns such as silk. However, a shorter back shed length produces a sharper shade, which is suitable for weaving coarser, hairier yarns. It is important to understand the factors that influence the degree of yarn elongation during hairy weave formation. A simple mathematical model was used to correlate warp yarn strain with aperture parameters [1, 10, 15].

Applied linguistics calculation of warp strain during shedding in Figure 6.

Let us consider h as half of the shed height. Therefore, H = 2h

Elongation in the front shed =E1 Now equations:

$$E_2 = \mathrm{AD} - \mathrm{Ac} = (h_1^2 + h^2)^{\frac{1}{2}} - L_1 = \left[(1 + \left(\frac{h}{L_1}\right)^2\right]^{\frac{1}{2}} - L_1 \tag{5}$$

$$\frac{h_2}{L_1} = \frac{d_2}{d_1} = \frac{(a+b)}{a} \quad so \frac{L_2}{L_1} = \frac{(x+y+b)}{(x+y)} x = (\frac{d_2}{d_1}) \tag{6}$$

$$l_1(1 + \frac{1}{2}\left(\frac{h_2}{L_1}\right)^2 + \frac{\frac{1}{2}\left(\frac{1}{2}-1\right)}{2}\left(\frac{h_2}{L_1}\right) + \Big) - L_1 = \frac{h^2}{2L_1} \tag{7}$$

(By neglecting higher power of $\frac{h}{L_1}$ which is <1) (8)

Therefor $\frac{L_{12}}{L_{21}} = i = shed\ symmetry\ parameter$

$$initial\ length\ of\ warp = L = AB = L_1 + L_2 = L_1 + \frac{L_1}{i} = L_1(\frac{1+i}{i}) \tag{9}$$

$$Total\ Elongation = E = E_1 + E_2 = \frac{h^2}{2L_1} + \frac{h^2}{2L_2} = \frac{h^2}{2L_1} = 1 + i \tag{10}$$

$$Strain = \frac{Elongation}{initial\ length\ 2L_1} = \frac{E}{L} = \frac{1}{L} x \frac{h^2}{2L_1} = \frac{h^2}{2L_1} + \frac{h^2}{2L_2} = \frac{h^2}{2L_1}(1+i) = \frac{h^2}{2L^2} \frac{(1+i)^2}{i} \tag{11}$$

From the above equation the following things can be inferred.

Warp strain increases with the increase in shed height.

Warp strain reduces with the increase in shed length

Warp strain reduces as the shed becomes symmetric (the value of *i* increases).

One pick corresponds to one rotation of the crankshaft. Figure 6 shows the timing of the various movements of the loom, corresponding to the angular position of the crankshaft. When the crank is facing the front of the loom (the side on which the weaver stands), it is considered the 0° position of the crankshaft. This is also referred to as front center. When the crank radius is facing down, it is considered the 90° position of the crankshaft [21]. This is also called the bottom center. When the crank radius is facing the back of the loom (backrest side), it is considered the 180° position of the crankshaft. This is called the back center. If the crank radius faces up, it is considered to be at 270° of the crankshaft. This is called the top center. At 0°, the leads reach their most forward position and beat up. On

the other hand, at 180°, the lead moves to its most rearward position [3, 10, 23]. The slay (and the reed) moves forward and backward for 360°. However, the heald does not move continuously. When the shed is fully open, the heald remains stationary for a certain period of time so as not to interfere with the rapier's passage through the shed. This is called the shed dwell time. Two types of shed timing are commonly used (early and late) [1, 10, 15].

Early shed timing is shown in figure 6, where E and L represent the timing of rapier entry and exit. The rapier enters and exits the shed at approximately 110° and 240°, respectively. The shed is leveled (closed) at 270°. The shed then begins to open as the two herds begin to move in opposite directions. The shed is fully open at 30°. At this moment, the two sheds are in two extreme positions (one of the sheds is at the top and the other at the bottom). From 30° to 150°, the sheds are stationary. Thus, the shed is fully open and stagnant during this time; after 150°, the herd begins to move in the opposite direction of the movement from 270° to 30°. This means that the topmost herd begins to descend, and vice versa. The shed is again at 270° in figures 6, 7.

The parameters which affect the cam design 'cam contour': Dwell period of the heald shaft ‰ it is normally determined by the type of weaving machine 'the given parameter of weaving machine related to its type and width'. This given dwell period in terms of angular rotation of the main shaft is converted to a particular cam angle. Shed type open, center-closed sheds, etc. Cam throw: ‰ it depends on the size of shed or the movement given to the heald shaft and the leverage between the cam and the heald shaft related to the size of cam. Transition curve ‰ for the position change type of curve considered is important to obtain a smooth operation.

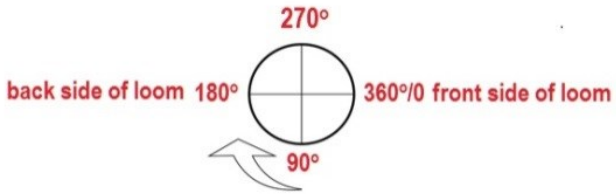


Figure 6. Applied linguistics different angular positions of crank shaft

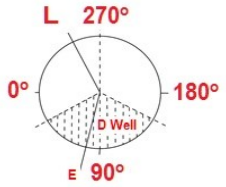


Figure 7. Timing for early shedding

Applied linguistics it is understood that when the rapier enters the shed (110°), more than half of the dwell period is over. When the rapier leaves the shed (240°), the shed is about to close. Therefore, how many movements of descriptive mechanics of textile industries there are six types, the first of which is the movement of transition?

There is high probability that the rapier will abrade the warp sheet which is not desirable especially for the delicate warp yarns. However, this type of timing is advantageous for weaving heavy cloth. Because, during beat up (0°), the shed is crossed. Therefore, There is another movement descriptive mechanics of textile industries, which is the movement of creativity, but there is a difference between it and the movement of the universe, because this is not from an object, and the movement of the universe is the corruption of an essence that preceded its occurrence, the newly inserted pick will be trapped by the crossed warp yarns. As a result, the pick will not be able to move away from the cloth fell ever after the reed recedes. This facilitates attaining higher picks per inch which is required for heavy fabric [1, 10, 15].

The problem of wear between the warp and the rapier can be minimized by employing a late shed as shown in figure 7. The universe is a delicate state to a precious state. The movement of creativity is a simple phrase that should not be understood as a complex meaning; In this case, the top opening is delayed so that the dwell time roughly matches the rapier flight timing. The shed is level (closed) at 0°. It then begins to open as the two herds move in opposite directions. Composition in the language of every nation and the meaning differs in simplicity according to the degree of the mind and the mind, and the rational and the rational, the shed opens fully at 120°; from 120° to 240°, the heald is stationary. Thus, during this time, the shed is fully open and stagnant. The timing of the rapier flight (110-240°) corresponds roughly to the dwell time; after 240°, the heald begins to move in the opposite direction and the shed is again level at 0°/360°.

Beat-up occurs when the shed is level and the healds have not yet intersected each other. Therefore, this timing is not favorable for thick fabrics. However, the movement of creativity is referred to the creator of things without Its meaning is a subject, and its meaning is a maker, and it appeared with the creator from the creator to the creator, not on the basis that I attached something to it, nor on the fact that I separated something from it, such timing is favorable for weaving delicate warp yarns, and the possibility of abrasion by the rapier is very low [1, 10, 15].

In teaching descriptive mechanics of textile industries, the image added something to it, for all these signs and indications are present in the things that are related to creativity, so it is not permissible to describe the creator with them, and if this were permissible, he would be included in them, and this is very far away, The early opening coupled with the position of the backup results in a high pick density in the weave for something to reach the limit above which anything is shortening, and what is below it is a failure. Figures 8, 9 shows the normal and raised positions of the backrest in perfect harmony with the senses ,Perfection are appropriate for intelligible things. If we notice different meanings, When the backrest is in the normal position, the upper and lower weaves are symmetrical with respect to line CN, in defining things or describing things through conclusive proof with argument that removes suspicion, or through traditional imitation , which shows the warp threads when the weave is horizontal. In this case, the two shed lines CUN and CDN are equal in length, which means that the tension in both sheds (top and bottom) is equal. However, when the backrest is raised from its normal position, the lengths of the shed lines become unequal.

This is evident from the fact that the length of the top shed line CUR is smaller than the bottom shed line CDR. Thus, the tension in the top shed line is less than the tension in the bottom shed line.

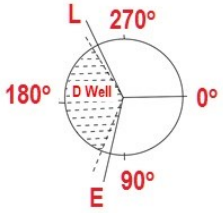


Figure 8. Applied linguistics of timing for late shedding

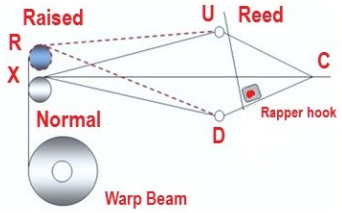


Figure 9: Applied linguistics of warp line with normal and raised backrest positions

In early unpacking, the upper house is level at 270°. At beat-up (360°), the upper threads are fully crossed and the upper threads of the last pick become the lower threads, and vice versa. Thus, as shown in figure 9a, the higher tension on the lower opening end will push the newly inserted weft thread (circle) downward out of the fabric plane. This is facilitated by the greater curvature of the upper weft end, which is now under lower tension. The previous pick (second circle from the right) is pushed upward against the fabric plane, but its size is reduced. This process is repeated each time a pick is inserted, resulting in a higher pick density in the fabric. When the beating is done crosswise, the newly inserted weft yarns are kept tightly engaged at both ends as the reed presses the weft yarns against the fabric surface against the frictional and bending resistance of the yarns (figure 10). When beating is completed and the slay begins to move toward the center rear of the loom, the newly inserted picks are trapped in the cross shed and cannot spring back from the cloth fall [1, 10, 15].

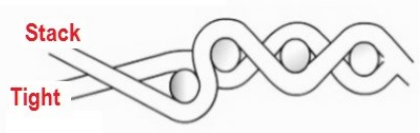
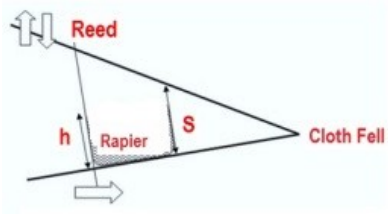


Figure 10: Applied linguistics of vertical displacement of newly inserted weft, Beat up at crossed shed Bending Factor

Bending factor is defined as the ratio of depth of shed in front of rapier(s) and the actual height of the rapier (h) as shown in Figure 10, So:

$$Bending\ factor = \frac{S}{h} \quad (12)$$

If it is greater than 1, then there will not be any abrasion between warp sheets and the rapier. Conversely, if it is much lower than 1, then severe abrasion will take place between warp sheets and rapier 'Figure 11, 12 '. This may lead to high warp breakage rate and even the trapping of rapier within the shed. The bending factor changes continuously as it is influenced by the following two factors: Movement of the healds and Movement of the sley. The bending factor will reduce as the top shed line will move in the downward direction causing reduction in the value of s and vice versa. Besides, as the reed moves towards the cloth fell, the depth of shed in front of rapier (s) reduces. Thus the bending factor reduces [6, 13, 14].



Cloth Fell rapier Top Shed Line

Figure 11. Applied linguistics of bending factor

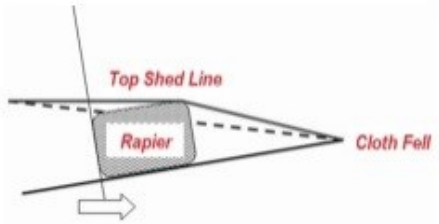
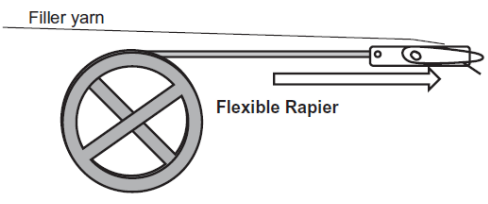


Figure 12. Applied linguistics of situation with low bending factor



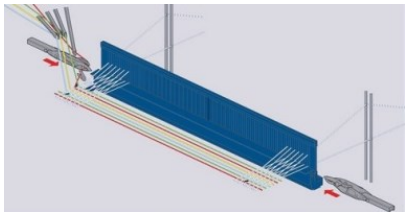


Figure 13. Applied linguistics of situation with low bending factor of rapier strip

The reed moves towards the back of the loom between 0°-180°. Then it moves towards the front of the loom between 180° -360°. For late shedding (where the shed levels at 0), dwell occurs between 120° -240°. Therefore, during this period, the healds are stationary. So, the depth of shed in front of the rapier varies only due to the sley movement. As the sley moves to the back centre at 180°, the depth of shed becomes the maximum at that point as shown by the blue line of figure12. However, the reed moves forward after 180° and thus the depth of shed reduce. After 240°, the shed starts to close and sley is still moving forward. Both the factors synergistically reduce the depth

of shed at a faster rate. Actual rapier height (2.8cm) has been indicated with the broken horizontal line [1, 10, 15]. It is observed that the depth of the shed is very close (slightly less) than the rapier height when the rapier enters and leaves the shed. So, the bending factor is close to 1.

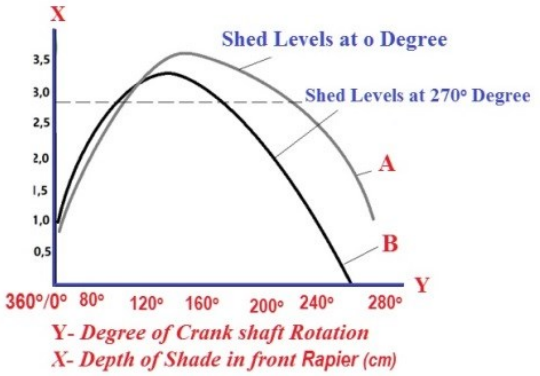


Figure 14. Applied linguistics of bending factors for early and late shedding

In the initial shed (where the shed levels off at 270°), dwell occurs between 30° and 150°; above 150°, the shed begins to close. However, the slay recedes to 180°. Thus, between 150° and 180°, two factors oppositely affect the bending coefficient.

As the red line in figure 6 shows, the shed height reaches its maximum around 160°; after 180°, the slay begins to move forward and the shed is still closed (up to 270°). Thus, after 180°, the shed depth decreases rapidly. At the rapier exit (240°), the shed depth is about 1 cm, exactly one-third of the rapier height. Thus, the severe wear between the warp sheet and the Rapier becomes more pronounced while the warp sheet leaves the rapier. Table 1 shows the values of the bending coefficient at early and late openings [1, 10, 15].

Table 1

Bending factors for early and late shedding

Healds crossing time	Angle degree	Bending factors Entering	Bending factors Leaving
Curve A(red): early shedding	270°	0.87	0.34
Curve B (blue): late shedding	0°	0.84	0.9

Applied linguistics of the reason for shifting the healds is to reduce wear between warp yarns when the healds cross [20]. If the warp sheet has a very high number of ends per inch, it is practical to use four or more healds in a plain weave. If the weave width is 150 cm and the end/cm value in the weave is 40, the total number of ends in the warp sheep would be 6000; if four healds are used, each heald would control 1500 ends. In the case of straight draft, four cams are needed to control four heddles [17, 19]. At one point, two cams would raise two of the heddles, and the other two cams would lower the other two heddles. Now, in the middle of the shed depth, the four healds cross simultaneously [3, 10, 23]. This happens when the four cams are paired in two groups and there is no phase difference between the two cams of the same group, but the phase difference between the two cams belonging to two different groups is 180 0 on the bottom shaft. When the profile of the shed cam is drawn according to simple harmonic motion (SHM), the velocity of the heald at the center of the shed depth is maximum [24]. Thus, when the healds intersect each other, the friction between the yarns increases, which can lead to yarn end breakage. This can be prevented by heald staggering, which prevents all ends (or healds) from crossing at the same time [1, 10, 15].

Two cams belonging to the same group can be arranged so that there is some phase difference (e.g., 5-10°) between them when mounted on the bottom shaft [24]. The other two cams belonging to the other group have a phase difference of 180° relative to the two cams in the first group, as depicted in Figure 13. This means that even when two healds are raised, they will not reach the center of the shed depth at the same time, as depicted in figure 14. Thus, the number of ends crossing at once is reduced and wear between warp threads is greatly reduced [1, 10, 15].

When two healds are used for weaving, a simple roller reversing mechanism can be used to raise the healds. However, a spring reversing device, as shown in Figure 15*"a,b"*, can also be used.

In this system, the spring extends as the heald lowers. As the radius of the shedding cam at the point of contact with the treadle bowl begins to decrease, the springs cause the heald to rise against gravity. This system has a drawback that can be understood from Figure 16 Transmission of motions in loom below. As the heald lowers, the warp sheet stretches. This causes tension (T) at both ends of the warp sheet. The direction of the tension is indicated by the arrows. The vertical component of the tension compensates to some extent for the weight of the heald frame (W). Thus, the force required to lift the heald from its lowest position is ($W - 2T\sin\theta$). On the other hand, as the heald is lifted, the vertical component of the tension acts downward and adds to the weight of the heald frame. Therefore, the force required to hold the heald frame in the uppermost position is ($W + 2T\sin\theta$), which is greater than the force required to raise the heald. However, since the springs are fully extended when the heald is in the lowest position, the maximum

force is applied to the heald frame. Similarly, when the heald is in the uppermost position, the springs are least extended and the heald frame is subjected to minimal force. Thus, an imbalance between the required force and the actual force occurs [1, 10, 15]. This problem can be minimized by using specially designed pulleys as shown in Figure 17.

As the heald is lowered, the pulley rotates anticlockwise. Thus the radius of the pulley (D), on which the spring tension (S) acts tangentially, reduces. However, the radius of the pulley in the region where the rope, connected to the heald, passes is constant (R).

As herd is lowered, D decreases and S increases. In other words, their product is kept somewhat constant. Thus, the force (T) acting on the held frame connection is also kept constant.

There are two types of positive cam shedding systems that reliably control the lifting and lowering of the heald. In the case of positive cam shedding, no reversing motion of the heald is required [24].

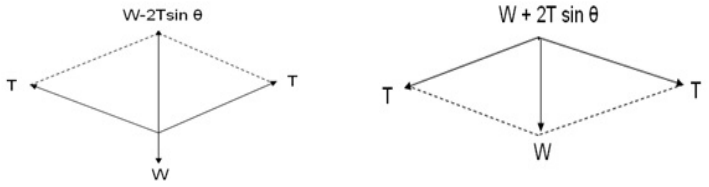


Figure 15. "a,b" Forced acting on heald frames

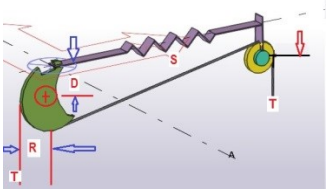


Figure 16. Transmission of motions in loom

Balancing the couple, the following expression can be formed.

$$2TR = SxD \; when : T = \frac{SxD}{2R} \tag{13}$$

I. Groove cam.

II. Matched cam.

The groove cam system is shown in Figure 18.

The grooved cam track is formed on a disc. The bowl or follower is attached to one end of the quadrant (tappet lever). As the cam rotates, the bowl moves up and down, and this movement is translated into lateral movement of the lower end of the tappet lever. A lever or link system is also used to move the heald up and down.

The matched cam system requires two cams and two followers to control one heald. In figure 18, two followers (a light-shielding follower and a non-shielding follower) are attached to both sides of the lever L with the fulcrum at point F. The light-shielding follower is controlled by the light-shielding cam and the non-shielding follower by the non-shielding cam. Figure 18 show that when the shaded follower is in contact with the minimum radius of the corresponding cam, the unshaded follower is in contact with the maximum radius of the corresponding cam. When the camshaft is rotated 90°, the situation is reversed. That is, when the shaded follower is pushed to the right, the unshaded follower is modified by the corresponding cam.

Thus, the lever (L) rotates clockwise around the fulcrum F [1, 10, 15].

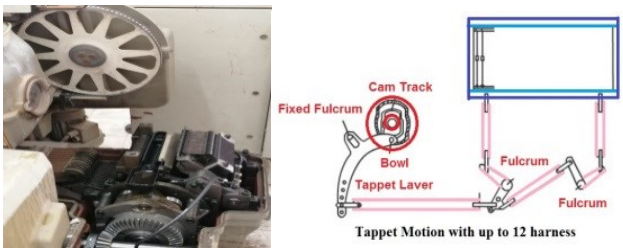


Figure 17. Positive cam shedding system

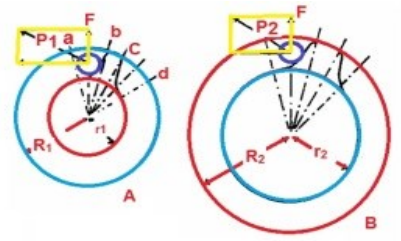


Figure 18. Matched cam shedding system (a) Schematic (b) Actual

NuovoPignon/SMIT Machine Versatility: Rapier weaving machine can be equipped with a tappet motion with up to 12 harness; positive cams, maximum 12 harness frames.

The methods shown in [3, 25, 26], can be used to create 3D model cam shedding system. We will simulate several positions of the cam shown in Figure 18. Research on the position of the design elements of the machine, it is possible to determine the necessary data for the design of the cam profile.

Applied Linguistics of Abstraction "ALA" There is another movement descriptive mechanics of textile industries, which is the movement of creativity, but there is a difference between it and the movement of the universe, because this is not from an object, and the movement of the universe is the corruption of an essence that preceded its occurrence, so it was said: The universe is a delicate state to a precious state. The movement of creativity is a simple phrase that should not be understood as a complex meaning. But I said this because the word is the same as the word in most matters, and the meaning is identical to the meaning in most matters, and the whole word comes from one valley of composition in the language of every nation, and the meaning differs in simplicity according to the degree of the mind and the mind, and the rational and the rational, and the movement of creativity is referred to the creator of things without Its meaning is a subject, and its meaning is a maker, and it appeared with the creator from the creator to the creator, not on the basis that I attached something to it, nor on the fact that I separated something from it,

Setting design cams for a particular job a new cam arrangement requires checking and changing, if necessary, the following parameters. Design cams: suitable for a particular job (or weave). No. of cams: each cam or a pair of cams can control one of the heald shafts. Transmission ratio of the rotary motion between the main shaft and the cam

shaft: It depends on the number of picks in the lifting plan (or design). The relative positions of cams in the set: It depends on the weave.

Applied Linguistics of Abstraction "ALA" in teaching descriptive mechanics of textile industries , The image added something to it, for all these signs and indications are present in the things that are related to creativity, so it is not permissible to describe the creator with them, and if this were permissible, he would be included in them, and this is very far away, so when he ignored these characteristics by investigating the choice, he described them as a metaphor for disorder, because in teaching descriptive mechanics of textile industries must remember it, describe it, call it, and intend it, for something to reach the limit above which anything is shortening, and what is below it is a failure. In perfect harmony with the senses ,Perfection is appropriate for intelligible things. If we notice different meanings, we ask for different names for them, so that this will help us in defining things or describing things through conclusive proof with argument that removes suspicion, or through traditional imitation.

NuovoPignon / SMIT Machine Controllable Shed Geometry: Modern rapier weaving machine offers shed opening free from setting and optimization of the shed geometry. The shed opening is easily adjusted to suit the style in production. The symmetrical shed geometry and very small shed offer lower stress on both the warp threads and filling. Automatic shed leveling on prevents starting mark due to yarn stretch caused by a stop at open shed. In the shed opening offers optimum geometry combined with a wide range of backrest position. Small or large shed opening can be easily set to suit the article being woven.

Example: single lift Jacquard becomes bottom closed shed [1, 10, 15].

Description of shad

In a semi-open shed, if one end needs to be continuously up-portioned with two picks, it will come down to the middle level (warp line) and then up-portion again. However, if one end must be in a down portion for two picks in a row, it does not move at all between picks. Overall, there is less wasted movement in semi-open shedding than in bottom closed shedding.

Example a semi-open opening is made with double action Jacquard.

In this case, the center (warp line) closes with each pick. Thus, if the end must be positioned at the top (or bottom) for two picks in a row, it will come to the middle position of the shed depth between the two picks. There is also a very large amount of wasted movement [1, 10, 15]

This is the ideal shedding, minimizing wasted movement of the end (or heel). If an end needs to be in the up position for two consecutive picks, it remains stationary in the up position between the two picks. Similarly, if an end needs to be in the down position for two picks, it is stationary in the down position between the two picks.

Shed cams should be designed to match the interlace pattern (plain, twill, satin, etc.). The design of the opening cam will affect the following:

1) Dwell time of the opening.
2) How the heald moves during ascent and descent.
3) Shedding cams are mounted on the bottom shaft (plain and its derivatives) or tappet "cam ") shaft.
4) The design of shedding cams requires the following parameters and information.
5) Weave design.
6) Minimum distance between center/most contact point of cam and follower.
7) Cam lifts (difference between the maximum and minimum radii of the cam).
8) Diameter of follower.
9) Dwell time of the cam (two dwell times).
10) Duration of rise and fall..
11) Characteristics of the movement (linear, SHM, etc.)

It is important to remember that the number of shedding cams, excluding skip drafts, is equal to the number of healds. The number of healds is equal to the number of ends in a design repeat [3, 10]. Therefore, the number of ends in a design repeat determines the number of shedding cams required. This is because after 'n' picks, a particular heald must return to the same position. Thus, the segments of the cam that can be used in one pick depend on the number of picks in design iteration [1, 10, 15]. Thus, the number of picks in design iteration determines the shedding cam design. Example An opening cam for a plain weave fabric is designed with the following conditions:

- Minimum distance between the center of the cam and follower (d): 4 units;
- Lift (l): 6 units;
- Diameter of follower (f): 2 units;
- Dwell time: 2/3 of pick;
- Movement pattern during ascent and descent Linear.

Generally, the dwell period is considered to be 1/3 of the pick. However, when weaving delicate yarns, a larger dwell may be used to prevent friction between the rapier and the warp.

Linear ascent (or descent) means that the vertical movement of the follower per unit time (per degree of cam rotation) is constant [1, 3, 10, 26]. Each of the two dwells will have a span of 2/3 x 180° = 120°. Thus, the span of rise (and fall) will be 60°. In other words, the movement pattern can be expressed as shown in the figure10:23.

Applied Linguistics of Abstraction "ALA" in teaching descriptive mechanics of textile industries, this is based on the sensory consideration, but the mind rises above this, because it knows the reality of the thing as it is, and does not dismiss the sense as a judgment, and never resorts to it. Rather, sense is a factor of the mind. The worker is

permissible once and modified once. There are types of images: mental and natural, verbal, aesthetic and artificial, psychological and verbal, simple and compound, blended and pure, waking and sleeping, absent and witnessed.

Follower centers is increasing, the heald is actually lowering and vice versa. This happens due to the arrangement of the cam and follower. When the cam radius increases, it presses the follower and treadle lever in the downward direction. As a result the heald is lowered [1, 10, 15, 27].

Therefore, dwell 1 represents the dwell at the bottom position of the shed.

This is because simplicity prevails, and there is no way to describe and define it except by approximation, and that is because simplicity prevails over it. However, it is delineated by saying: It is what is manifested by unity, established by permanence, and perpetuated by existence. The mental image is sister to that, except that it is inferior to it in sensory degradation, but in the verbal rank, and there is no distinction between the two images except in terms of the adjective, otherwise the unity is common, dominant, and comprehensive.

Description of Type of shed

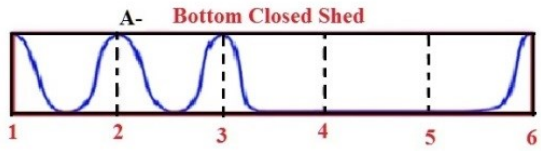


Figure 19. Arrangement of shedding cams for heald staggering

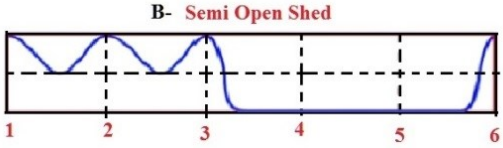


Figure 20: Crossing of healds with staggering arrangement

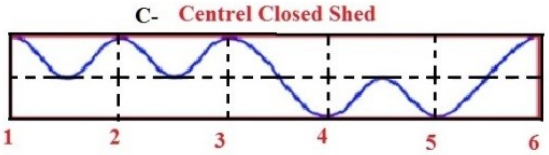


Figure 21. Arrangement of shedding cams for heald staggering

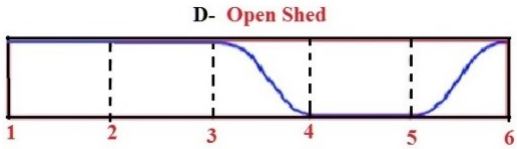


Figure 22: Crossing of healds with staggering arrangement

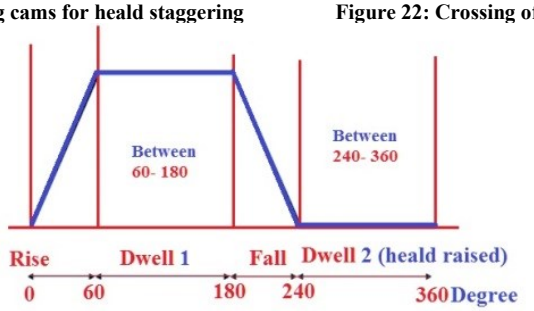


Figure 23. Linear movement pattern for plain weave

Discussions

Applied Linguistics of Abstraction "ALA" in teaching descriptive mechanics of textile industries of the artificial image is clearer than that, because, through its immersion in its matter, it is visible to sight, hearing, and all senses, such as the image of (the main processes of weaving) and the like. As for the psychological image, it is due to science and knowledge and their consequences in what achieves or serves it, and it is truly sister to the mental image. As for the simple picture, the difference is in the ranks of the simple, and it is not possible to draw it except by gesturing to it. If this gesture is accompanied by a hearer, then that is it. Otherwise, there is no hope for a satisfactory expression about it. As for the composite form, it is evident to the sense of the effects of nature in its matter, and it is also apparent to the soul by the effects of the mind as it flows over it, and just as there is a difference between the simple by which the simple is almost made into a compound, likewise between the compound and the compound there is a difference by which the compound is almost made simple, and this is a sentence whose interpretation is lacking. As for the blended form, it is the sister of the compound form, and likewise the pure form is the sister of the simple form, and this is not a distinction in wording and pronunciation, if they are related and not mutually exclusive. As for the waking image, it is a group of feelings, because it flows through the consciousness of all feelings, and what they have and what they have.

Mid-semester exam. Machine production technology (1) 2023. Cores code: Swkw3109

April 10, 2023. Answer the questions"

The First Question:

A- Explain in terms of the general classifications of textile machinery?

b- Explain the types and methods of the self... with examples?

c- Explain the movements that take place on the weaving "loom"...with clarification by drawing and technical terminology?

Second Question:

a- Explain the reasons for the increase in warp strain with the increase in shedding height?

b- Explain the reasons for the decrease in warp strain with the increase in shedding length

c- Explain the reasons for the decrease in warp strain as the shedding becomes symmetrical?

d- Explain, with equations and drawing, the calculation of the volume of the shedding?

Table 2

The results of Mid-Semester Exam. Machine production technology (1) 2023

Questions	Beni Sweiaf University, Egypt	Maximum of 5	Suez e University, Egypt	Maximum of 5
First				
A	18 students	4.8	18 students	4.4
B		4.7		4.3
C		4.4		4.2
Second				
A	18 students	4.6	18 students	4.3
B		4.3		4.2
C		4.8		4.1
D		4.5		4.0

***Conclusions**

This research process provides an overall research strategy and framework that includes all parameters from problem formulation to problem validation. Applied Linguistics of Abstraction "ALA" in teaching descriptive mechanics of textile industries as for the verbal form, it is heard with the instrument, which is the ear, and if it is deaf, then it has a ruling. If it is spoken, then it has a ruling, and in both cases it is between three levels: either it is intended to improve understanding, or it is intended to achieve understanding, and for all of them, it depends on its specificity in its emergence from the soul of the speaker, and its arrival to the soul of the listener, and this form has a dimension. All of this is on another level if it is combined with melody and rhythm in the textile industry like a musician (mechanical weaving rhythms) descriptive mechanics of textile industries, then it gives pleasant things, I mean that it pleases the senses, inflames the breath, calls for the cup and the bowl, cheers the mood, softens the mind, and reminds of the world that is longing for, longing for on him. This is the end of his words, based on what he had memorized and taught him to the mind, and if he had taken dictation from him, he would have been better and wiser, but the narration in the tongue is not possible in every place, so this is at the utmost level of transmission and interpolation, and whoever hesitates to object to it has listened and made his page fade away. He was humbled by his mind over income, by thought and discrimination

This research flow provides a basis for researchers to understand how the research methodology is conceived and constructed. In particular, this research flow helps new researchers understand the research environment and methodology.

The Egyptian use of abstract styles in all aspects of life has been prevalent since the Pharaonic period, more than 7000 B.C., and the paintings on the walls of ancient Egyptian temples and papyri record the curriculum and courses that emerged from the abstract style of life. After death... We know that the courses. We find that it contains an abstract scientific foundation without stuffing (junk knowledge) in addition to unnecessary and unneeded information. And that information is the basic science for the recipient. The level of abstraction in an abstract curriculum depends on:

1) Speed of abstract information.
2) Abstraction as a new approach in mechanics curriculum and teaching methods in the field of textile industry, i.e., it helps the researcher to think of it as one of the samples or models of research data collection and process from problem formulation to research discovery.
3) Information base for the receiver between the teacher and the recipient.
4) 3- Drawings or abstraction drawn between the teacher and the recipient.
5) Derogatory content between teacher and recipient.
6) Time of sending and receiving scientific content between teacher and recipient.
7) Communication tools between teacher and recipient.
8) Language of communication between teacher and recipient.
9) Place of communication between teacher and receiver.
10) The latest technology adopted in the labor market between teacher and recipient.
11) Regular curriculum development every three months.
12) Engineering mathematical measurements and calculations, engineering equations, abstract ways to explain messages, abstract curriculum.
13) Geometric drawings in the style of lateral projection taken by Egyptian pharaohs, simplified abstract methods to establish information for the recipient.
14) Explanation of the general classification of textile machinery parts by drawings, terminology and methods, with simplified examples, to get into the mindset of the receiver and not to forget.
15) Abstraction approach in the teaching of geometrical descriptive mechanics of the textile industry using "case studies".
16) Research Methods and Design showed the overall process of the research flow for a given study.
17) Data sources and data collection methods.

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