

Semantics of Patterns and Symbols in Uzbek Traditional Pottery: A Visual-Semiotic and Practice-Based Study

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Abstract. Patterns on Uzbek traditional pottery are usually admired as decoration, yet they also work as a visual language that carries ideas about nature, light, water, order and continuity between generations. This language is rarely described systematically, and the knowledge needed to read it is passed on mainly through the master–apprentice (usto–shogird) tradition rather than through texts. The aim of this study was to identify the main semantic layers of ornament in Uzbek traditional pottery and to show how they are acquired in workshop practice. The study combined three components: (1) a document analysis of eight descriptive sources on Uzbek ceramics; (2) a visual-semiotic analysis of fourteen motifs using Panofsky’s three levels of interpretation and Peirce’s sign categories; and (3) a practice-based observation of the author’s own learning in a master–apprentice workshop, documented photographically. The motifs were grouped into four semantic themes: plant abundance and renewal; light and water; order and protection; and heritage and continuity. Only a minority of motifs have meanings that are explicitly documented in the literature; the majority are known by their names, which function as verbal anchors of meaning. The results suggest that the meaning of a pattern is encoded at several stages of production (vessel form, painting, glaze and firing) and is learned through the hand before it is learned through words. Recording motif names and their meanings in apprentice training is proposed as a practical way to protect this heritage.

Keywords: Uzbek ceramics; ornament; semantics; visual semiotics; Rishtan; Gijduvan; master–apprentice tradition; intangible cultural heritage.

1. Introduction

Pottery is one of the oldest and most continuous crafts of Central Asia. In Uzbekistan, glazed ceramics developed in several regional schools, and each of them has its own palette, set of forms and repertoire of ornament [1, 4, 6]. A plate or a jug from such a school is not only a useful object: its surface is covered with plant shapes, rosettes, borders and bands that are repeated, named and passed from teacher to student. These patterns belong to what is now described as intangible cultural heritage, that is, knowledge and skills that communities recognise as part of their identity and transmit from generation to generation [12].

Researchers of Uzbek ceramics have described the technology, the regional schools and the stylistic features of the craft in considerable detail [1, 2, 4, 6]. The classic survey by Rakhimov, for example, catalogues stripe designs, circle motifs and leaf forms of Rishtan, Gijduvan and Samarkand, and explains how glaze colours are obtained from mineral oxides [1]. Descriptions of what the motifs mean, however, are much rarer and often limited to a few sentences. Recent regional studies note that ornaments of Rishtan pottery are widely recognised symbols with philosophical content, for instance almonds and peppers as symbols of light and sand as a symbol of water and, through it, of peace [2], but these statements are scattered and not placed into a general framework. Popular sources, in turn, give the names of motifs without explaining them [4].

This gap matters for two reasons. First, the meanings of ornament are mostly carried by oral tradition. The craft has traditionally been learned in the usto–shogird (master–apprentice) system, and critics warn that very short training courses developed for the tourist market may weaken the transmission of both technique and meaning [6]. Second, young people who study pottery today often learn to reproduce a pattern correctly without being told what it represents, which turns a symbol into a decorative pattern.

Research questions. The study was guided by three questions: (RQ1) Which motifs are characteristic of Uzbek traditional pottery, and what meanings are attached to them in the literature? (RQ2) At which stages of making a vessel is meaning encoded? (RQ3) How is this meaning acquired by an apprentice in a workshop?

Aim and objectives. The aim was to describe the semantic layers of ornament in Uzbek traditional pottery and to show how they are learned in workshop practice. The objectives were: (1) to compile a corpus of motifs and their documented meanings; (2) to classify the motifs into semantic themes; (3) to relate the stages of making a vessel to the layers of meaning; and (4) to formulate recommendations for training young potters.

Novelty. The study separates what the sources actually document from what can only be interpreted, and it adds the apprentice's first-hand view of making, which is seldom recorded in the literature on Uzbek ceramics.

2. Theoretical And Historical Background

2.1. Regional schools of Uzbek glazed ceramics

Writers on Uzbek ceramics usually distinguish three groups of glazed pottery that took shape in the nineteenth century: the north-eastern (Fergana) group, the central (Bukhara–Samarkand) group and the south-western (Khorezm) group [4, 6]. The Fergana and Khorezm groups are known for blue wares covered with alkaline (ishkor) glaze, whereas the Bukhara–Samarkand centres are known for yellow-brown wares with lead glaze [4, 6]. Tashkent potters, working in the Kukcha district, were influenced by both traditions [4]. Rakhimov describes Rishtan as the leader of artistic ceramics, with masters specialising in high-quality faience (chinnipaz), white-ground work under transparent alkaline glaze (okpaz) and yellow lead glaze (sariqpaz), and he characterises Gijduvan painting by a contrast of dark blue, dark green, yellow and brown on dark red and white engobe, with compositions that are more uniform and classical than those of Rishtan [1].

Within this picture the Rishtan school is often seen as the most varied. Typical Rishtan motifs include chorbarg (a four-leaf rosette or quatrefoil), anorgul (pomegranate flower and fruit), bodomgul (a stylised almond blossom), barg (leaf) and islimi (a spiralling plant shoot) [4]. Patterns are painted freehand with a brush, and bright orange and turquoise tones mixed with white are common [2]. Gijduvan ornament, in contrast, is dominated by stylised plant forms, often combined with geometric patterns [1, 8].

2.2. Tashkent and the Rakhimov tradition

The Tashkent school related to the family of the ceramist Mukhitdin Rakhimov (1903–1985), People's Artist of Uzbekistan, who studied ceramic traditions of different periods and revived ornamental motifs and colour compositions of the tenth to twelfth centuries [5]. His book on the artistic ceramics of Uzbekistan, first published in Russian in 1961 and later in English with UNESCO support, remains a basic reference for the field [1, 7]. In 2005 the ceramics school “Usto–shogird” opened in the family workshop in Tashkent with the support of the UNESCO office, with the purpose of reviving, preserving and promoting traditional Uzbek ceramics [5]. Contemporary members of the family combine traditional technology with author's experiments and treat the tree, the bird and the dot as meaningful images [7]. This setting makes the school a suitable place for observing how meaning is transmitted in practice.

2.3. Analytical framework

Three theoretical tools were used. Panofsky's model separates three levels of reading an image: the pre-iconographic level (what can be seen), the iconographic level (the conventional subject, usually fixed by a name) and the iconological level (the deeper cultural meaning) [10]. Peirce's classification of signs into icons (resemblance), indexes (factual connection) and symbols (convention) helps to decide how a motif signifies [13]. Barthes' distinction between denotation and connotation, and his idea that a verbal label “anchors” the meaning of an image, is useful because Uzbek ceramic motifs have fixed names, such as chashmi bulbul (“nightingale's eye”) or bodomcha avvali bahor (“small almond, early spring”) [11, 1]. Finally, Gombrich's analysis of decorative art as a “sense of order” explains why repetition, framing and symmetry carry meaning of their own [9], while the concept of legitimate peripheral participation [14] and recent work on craft knowledge [15, 16] explain how apprentices acquire skill and meaning through guided practice.

3. Materials And Methods

Design. The study was qualitative and descriptive-analytical. It had three components that were analysed separately and then compared: document analysis, visual-semiotic analysis and practice-based observation.

Document analysis. Eight descriptive sources on Uzbek ceramics were reviewed: a classic monograph [1], a regional journal article on the Rishtan school [2], a conference guide to contemporary Rishtan ceramics [3], two articles on regional schools and on the Rakhimov family [4, 5], an article on tradition and individuality in contemporary ceramics [6], a description of the Rakhimov studio [7] and a description of Gijduvan ceramics [8]. Information was extracted on the names of motifs, their regional attribution, the colours and glazes and any explicit statement about meaning. Further theoretical and methodological works [9–17] provided the analytical framework. Sources were read in the languages in which they were published, and Uzbek and Russian terms were translated by the author.

Visual-semiotic analysis. Motifs named in the sources, together with the patterns visible in the workshop (see below), were analysed at three levels. At the first level, the motif was described as it appears (Panofsky's pre-iconographic level). At the second level, its traditional name and attribution were recorded (iconographic level). At the third level, the meaning documented in a source was distinguished from an interpretive reading proposed by the author on the basis of general knowledge of Central Asian folk culture (iconological level). Every interpretive reading is labelled as such in Table 1 and has not been verified by interviews with masters.

Practice-based observation. The author is an apprentice in a workshop working in the usto–shogird tradition of the Rakhimov school. Her own practice (preparing the clay, forming vessels on the potter's wheel and painting ornament) was observed from the inside and documented in photographs that she made or that were made of her during work (Figures 1–3). The photographs were treated as visual field notes: they show the setting, the stages of making and the tools, and they were used to relate the stages of production to the layers of meaning, not to measure anything. The images show the author herself and are published with her consent.

Thematic grouping. Motifs were grouped into themes by an iterative process of reading and comparing, following the general logic of thematic analysis [17]: initial labels were assigned to each motif, labels that expressed the same idea were merged, and the resulting themes were checked against the full list of motifs.

Limitations of the design. The study does not include interviews or a survey, and the photographs come from one workshop and one apprentice. The results are therefore a conceptual and descriptive contribution that prepares the ground for field studies with masters, not a statistical generalisation.



Figure 1. The research setting: the author at an electric potter's wheel in a workshop whose wall displays plates in the radial, blue-and-white manner of the Fergana tradition; freshly thrown jugs stand on the table.
Source: author's archive.

4. Results

4.1. Corpus of motifs and their documented meanings (RQ1)

The review yielded fourteen motifs or motif groups that are named in the sources and are characteristic of Uzbek ceramic schools (Table 1). Ten of them are named ornaments of the Rishtan, Gijduvan, Samarkand and Gurumsaray traditions, two are motifs of Rishtan plate painting and two are images described in contemporary studio practice. For each motif Table 1 gives the denotation, the place of attestation, the meaning that is documented in a source and, separately, an interpretive reading.

Table 1. Motifs, their attestation and layers of meaning

Motif	Denotation	Attested in	Documented meaning	Interpretive reading (author)
<i>Chorbarg (quatrefoil)</i>	Four-leaf rosette	Rishtan [4]	Name only; no meaning stated	Four-fold balance around a centre; order
<i>Anorgul (pomegranate flower and fruit)</i>	Pomegranate blossom and fruit	Rishtan [4]; Rishtan stripe designs [1]	Name only	Abundance, fertility (common folk reading; to be verified with masters)
<i>Bodomgul (almond blossom)</i>	Stylised almond flower	Rishtan [4]	Almond read as a symbol of light [2]	Light; early spring blossom as renewal
<i>Bodomcha avvali bahor</i>	“Small almond, early spring” border	Gijduvan [1]	Season is stated in the name itself	Renewal; arrival of spring
<i>Barg (leaf)</i>	Leaf, including almond leaf	Rishtan [4]; Gijduvan [1]	Name only	Vitality, growth
<i>Islimi (plant shoot)</i>	Spiralling vine	Rishtan [4]	Name only	Continuity, unbroken growth
<i>Qalampir (pepper)</i>	Pepper pod	Rishtan plates [2]	Read as a symbol of light [2]	Light, warmth
<i>Qum (sand)</i>	Sand motif	Rishtan plates [2]	Symbol of water, hence of peace and a calm life [2]	Water as source of life
<i>Chashmi bulbul</i>	“Nightingale’s eye”	Samarkand stripe [1]	Name only	Watchfulness; beauty and song of the nightingale
<i>Chashmi gusfand</i>	“Sheep’s eye”	Gijduvan [1]	Name only	Protection; pastoral prosperity
<i>Baliq jingila</i>	Fish-like circle motif	Samarkand [1]	Name only	Water, abundance
<i>Cross and star figures</i>	Large cross-shaped and star-shaped figures	Gurumsaray [4]	Described as archaic painting style; no meaning stated	Celestial order; protection
<i>Tree of life / family tree</i>	Tree combined with birds	Rakhimov studio [7]	Heritage, family and tradition as linked images [7]	Continuity between generations
<i>Birds and Humo; dot</i>	Sirin, peacock, swallow, nightingale; legendary Humo; a single dot	Rakhimov studio [7]	Birds as messengers of higher powers; Humo as wisdom, freedom, happiness; dot as the origin of all things [7]	Transcendence; origin and growth of form

Table 1 shows that the documented layer is thin. Only five of the fourteen entries have a meaning that is stated in a source (bodomgul, qalampir, qum, the tree of life, and the birds, Humo and dot group), and one more (bodomcha avvali bahor) carries its meaning in its name. For the remaining eight entries the sources give a name, a place and

sometimes a description of style, but no explanation. This is not evidence that the motifs were meaningless: it indicates that the meaning has been transmitted orally, as part of the craft, and that it has rarely been written down. The name of the motif therefore becomes the main carrier of meaning, which agrees with Barthes' notion of verbal anchorage [11].

4.2. Semantic themes

Grouping the motifs produced four themes (Table 2). The themes are not mutually exclusive: the almond, for example, is at once a plant form and a symbol of light.

Table 2. Semantic themes of ornament in Uzbek traditional pottery

Theme	Motifs	Core idea	Level of documentation
1. <i>Plant abundance and renewal</i>	Anorgul, bodomgul, bodomcha avvali bahor, barg, islimi	Growth, fertility, the return of spring	Low: mostly names; one seasonal name [1]
2. <i>Light and water</i>	Bodomgul, qalampir, qum, baliq jingila	Light as a positive force; water as peace and life	Medium: stated for almond, pepper and sand [2]
3. <i>Order and protection</i>	Chorbarg, chashmi bulbul, chashmi gusfand, cross and star figures	Symmetry around a centre; vigilance	Low: interpretive
4. <i>Heritage and continuity</i>	Tree of life, birds and Humo, dot, islimi	Family, tradition, origin, transcendence	Medium: stated for studio works [7]

Theme 1 is the largest in number of motifs. This agrees with the general character of Rishtan and Gijduvan decoration, which is dominated by plant forms [1, 4, 8]. Theme 2 is the best documented, and it shows an important feature of the symbolic system: the meanings “light” and “water” are not tied to pictures of light or water but to plants, a spice and sand. In Peirce's terms, these motifs are symbols rather than icons, since the connection between sign and meaning rests on convention [13]. Theme 3 is the most interpretive. Its motifs are named after eyes or are built on a symmetrical, centred structure, and their reading is based on the general role of symmetry and framing in decorative art [9]. Theme 4 is partly new: it comes from the work of contemporary masters who consciously give traditional symbols a personal meaning [6, 7].

4.3. Meaning encoded at stages of making (RQ2)

The sources describe meaning mainly in terms of motifs, yet the workshop observation shows that meaning is introduced earlier and later than the painting of the motif. Table 3 relates five stages of making a glazed vessel to the layer of meaning that is encoded at that stage.

Table 3. Stages of making and the layers of meaning encoded at each stage

Stage	What the maker does	Layer of meaning encoded	Illustration
<i>Forming</i>	Centres the clay and raises the walls on the wheel; chooses the type of vessel (jug, bowl, plate)	Form and function: what the object is for and how it is used in the home and at the table	Figures 2a, 2b
<i>Surface preparation</i>	Coats the vessel with a layer of liquid clay (slip or engobe) to create a ground	Ground colour, which later frames the pattern (white or dark ground)	Figure 2b
<i>Painting</i>	Applies the pattern freehand with a brush in bands, borders and a central field	The motif, its name and its position on the vessel	Figure 3
<i>Glazing and firing</i>	Covers the vessel with transparent alkaline or lead glaze and fires it	Colour: turquoise, blue, green, yellow or brown, fixed by the mineral oxides and the type of glaze [1]	–
<i>Display and use</i>	Vessels and plates are shown on walls, tables and in the home	Social meaning: heritage, hospitality, identity	Figure 1

The forming stage deserves attention because the shape of a vessel is the first decision that frames everything that follows. Figure 2 shows two moments of this stage. In Figure 2a the apprentice centres and raises a column of clay on the wheel; in Figure 2b she works on a small jug above a basin of liquid clay. A jug, a bowl and a plate each invite a different arrangement of ornament: a plate has a centre and a rim and therefore calls for a radial composition, whereas the body of a jug offers bands that run around the vessel. This is visible in the plates displayed on the wall of the workshop (Figure 1), where the pattern radiates from the centre towards the rim in the manner described for the Fergana school [4].



(a)



(b)

Figure 2. The forming stage: (a) centring and raising the clay on the wheel; (b) working on a small jug above a basin of liquid clay (slip). Source: author's archive.

The painting stage is shown in Figure 3. The apprentice paints a bottle-shaped vessel on a white ground with a fine brush. A band of dark vegetal ornament and a plain band run around the body. The pattern is built from repeated units and is divided into zones, which corresponds to what Gombrich calls the framing and rhythm of decorative art [9]. The fact that the pattern is painted freehand is consistent with the observation that Rishtan patterns are applied directly with a brush [2]. Freehand painting has a semantic consequence: because the line is not traced, each repetition of a motif is slightly different, and the quality of the line shows the control and the experience of the painter.



Figure 3. The painting stage: freehand application of a band of vegetal ornament with a brush on a white ground. Source: author's archive.

The firing stage, which cannot be seen in the photographs, matters for meaning because colour is a product of materials. Rakhimov explains that copper oxide gives green in lead glaze and a bright blue when potash is added, that antimony oxide gives yellow and that manganese gives violet-brown [1]. The turquoise and blue that dominate the Fergana school are thus the result of a particular alkaline recipe, and their association with sky and water can be

understood only together with the material process that creates them. In Rishtan work these tones are often mixed with white and orange [2], which may create the bright, light-filled impression that distinguishes the school from the darker contrasts of Gijduvan [1].

4.4. How the apprentice acquires meaning (RQ3)

The reflective observation of the author's practice produced three findings that concern how meaning is learned.

Meaning is learned through the hand first. In the author's experience, an apprentice at the beginning repeats motifs without a verbal explanation. The repeated drawing of the same shoot or leaf trains the hand to produce the characteristic curve, and only later does the name of the motif and its meaning become part of the apprentice's knowledge. This is consistent with the model of legitimate peripheral participation, in which newcomers learn by taking part in real tasks of the community under the guidance of experienced members [14], and with the view that craft knowledge is largely tacit and held in skilled movement [15, 16].

The name is the carrier of meaning. Because only a minority of motifs have a written explanation (Table 1), the master's spoken name for the motif, such as chorbarg or chashmi bulbul, is what an apprentice remembers and later passes on. Where the name contains a statement ("early spring"), the meaning survives easily; where the name is only descriptive ("sheep's eye"), the deeper meaning is exposed to loss if the master's explanation is not recorded.

The workshop is a semantic environment. The wall of plates, the tools, the clothing and the shared work form a setting that carries meaning in itself. In Figures 1–3 the apprentice wears a dark embroidered skullcap and an apron, which links the manual work to the clothing of the craft and to the heritage identity that sources associate with the master families [5, 7].

4.5. Comparative profile of the schools

To place the motifs in their regional context, the information in the sources was summarised in a comparative profile of four centres (Table 4). The profile shows that the schools differ not only in colour but also in the way ornament is composed, which affects how a motif is read.

Table 4. Comparative profile of four centres of Uzbek ceramics

Centre	Glaze and palette	Characteristic motifs	Compositional character	Sources
<i>Rishtan (Fergana)</i>	Alkaline (ishkor) glaze; turquoise and blue with white and orange tones	Chorbarg, anorgul, bodomgul, barg, islimi; almond, pepper and sand on plates	Varied; freehand brush painting; elegant, light-filled	[1, 2, 4]
<i>Gijduvan (Bukhara)</i>	Dark blue, dark green, yellow and brown on dark red and white engobe	Stylised plant forms combined with geometric patterns; almond leaf; "sheep's eye"	More uniform and classical; strong colour contrast	[1, 8]
<i>Samarkand (Bukhara–Samarkand)</i>	Yellow-brown wares under lead glaze	"Nightingale's eye" stripe; fish-like circle motif	Stripe and circle compositions	[1, 4, 6]
<i>Tashkent (Rakhimov tradition)</i>	Local clay, glazes and pigments made in the studio from mineral oxides	Revived tenth- to twelfth-century motifs; tree of life, birds, dot	Traditional pattern with author's elements; individual style	[5, 7]

The comparison confirms that the same repertoire of plant forms is treated differently by each centre. Rishtan favours open, varied and luminous compositions, Gijduvan favours disciplined, contrasting and uniform ones, and the Tashkent tradition deliberately combines inherited elements with individual ones. For the apprentice this means that learning a motif always means learning the school's way of placing, colouring and repeating it, and that the meaning of a motif cannot be separated from the school in which it is painted.

5. Discussion

The study set out to describe the semantic layers of ornament in Uzbek traditional pottery. Three points emerge from the results.

First, meaning in Uzbek pottery is multi-layered and distributed along the whole production chain. Previous descriptions concentrate on motifs [1, 4] or on regional schools [6]. The comparison in Table 3 and the regional profile in Table 4 suggest that the form, the ground, the pattern, the colour and the setting each contribute to the message of the object, and that a reading limited to the motif misses much of it. This view is close to Panofsky's idea that deeper meaning is revealed only when the object is read together with its cultural context [10].

Second, the documented layer is much thinner than the practised layer. Only about one third of the motifs in Table 1 have an explicitly documented meaning. For a heritage that is transmitted orally, this is a risk. Critics have already pointed out that shortened training for the tourist market weakens the traditional master–apprentice system [6]. If the meaning is carried by the spoken name and the master's explanation, a short course that teaches only how to reproduce a pattern would produce skilled copyists who cannot read the object they make. This risk is greater for motifs of theme 3, whose interpretation is the least documented.

Third, tradition and individuality are not opposed. Contemporary masters, including those of the Rakhimov family, combine traditional technology with author's experiments and with images such as the tree, the bird and the dot to which they give new interpretations [6, 7]. This suggests that the semantic system is alive: old motifs keep their meaning, and new meanings are attached to them. The task for education is therefore not to freeze a list of "correct" meanings but to give the apprentice the means to understand the existing ones and to create new ones consciously.

Practical implications. On the basis of these findings, four recommendations can be made for schools and workshops that train young potters: (1) to teach every motif together with its name, its place of origin and its meaning, and to mark clearly which meanings are documented and which are traditionally told; (2) to keep a written or recorded "motif book" in which masters explain the motifs in their own words; (3) to include in the programme the study of materials, so that the apprentice understands why a given colour is obtained; and (4) to keep the ustoz–shogird structure, with real tasks and guided practice, even when short courses are offered.

Limitations. The study has the limitations noted above. The sources are descriptive and sometimes popular in character; the interpretive readings in Table 1 are hypotheses that were not checked with masters; the practice-based observation concerns one apprentice in one workshop; and the photographs show only part of the production chain. The proportion of documented meanings should not be taken as a quantitative measure but as an indication of the state of the literature reviewed.

Directions for further research. The next step is a field study with structured interviews with masters of the Rishtan, Gijduvan and Tashkent schools in which each motif in Table 1 is shown and its name, origin and meaning are recorded. A comparative study of apprentices in long and short training programmes could test the claim that short courses reduce the transmission of meaning, and a photographic or digital archive of motifs could support teaching.

6. Conclusion

Ornament on Uzbek traditional pottery is a visual language whose meaning is spread along the whole process of making: the form of the vessel, the ground, the freehand pattern, the colour created by glaze and firing, and the setting in which the object is used. Fourteen motifs were analysed and grouped into four themes: plant abundance and renewal, light and water, order and protection, and heritage and continuity. Only a minority of them have meanings documented in the literature, and the names of the motifs act as the main carriers of meaning. Observation of workshop practice shows that an apprentice acquires meaning through the hand first and through words afterwards. For this reason, the safeguarding of this heritage requires the preservation of the master–apprentice system and the recording of the masters' explanations of motifs. The proposed classification and the three-level analysis can be used as a basis for field studies and for teaching programmes in pottery schools.

Ethics And Author Statement

The photographs show the author herself during workshop practice and are published with her consent. The study did not involve interviews with third parties or the collection of personal data. The interpretive readings of motifs are the author's hypotheses and are marked as such.

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