

Science and Poetry in Medieval Persia

Nizami Ganjavi is one of the foremost figures in Persian poetry, living in Azerbaijan in the second half of the twelfth century. One of the oldest Western poets in Persian literature, he is acclaimed for his five *masnavis* which are assembled to form the *Khamsa (Quintet)*. His reputation is that of a difficult and refined poet, who introduced into his verse vocabulary, expressions and allusions to the then-known sciences. This study considers all his verses containing allusions to trees and their fruit. The scientific contents of these allusions are then checked with the help of Arabic and Persian medieval scientific treatises, ranging from the ninth to the seventeenth century. As a result, this study not only proposes a better understanding of nature imagery in the work of a seminal Persian poet, but provides a useful insight into the breadth and depth of the education of medieval poets and their readers.

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Science and Poetry in Medieval Persia

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Medieval Persia*

The Botany of Nizami's Khamsa

CHRISTINE VAN RUYMBEKE

University of Cambridge



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Abbreviations

AB (tr.)	AL-BIRUNI, (<i>Kitab al-saidana fi 'l-tibb</i>), <i>The book on pharmacology</i> (tr.)
AB (ed.)	AL-BIRUNI, <i>Kitab al-saidana fi 'l-tibb</i> (ed.)
AS	AL-SAMARQANDI, (<i>Kitab al-qarabadhin</i>), <i>The Medical Formulary</i> (tr.)
ASA	ASADI TUSI, <i>Lughat-i Furs</i>
EIr	<i>Encyclopaedia Iranica</i>
FADR	FAKHR AL-DIN RAZI, <i>Jami' al-'Ulum</i>
HIR	HIRAVI, <i>Kitab al-abniya 'an haqa'iq al-adwiya</i>
HM	HAKIM MU'MIN, <i>Tuhfa-yi Hakim Mu'min</i>
HP	NIZAMI, <i>Haft Paikar</i>
HUD	<i>Kitab al-hudud al-'alam</i>
IAA	IBN AL-'AWAM, (<i>Kitab al-filaha</i>), <i>Le Livre de l'agriculture</i> (tr.)
IAB	IBN AL-BAITAR, (<i>Jami' li mufradat</i>), <i>Le Traité des simples</i> (tr.)
IK	IBN KHALDUN, <i>Muqadimma</i> (tr.)
IM	IBN MASAWAIH, (<i>Kitab al-jawahir al-tib</i>), <i>Treatise on Simple Aromatic Substances</i> (tr.)
IN	NIZAMI, <i>Iqbal Nama</i>
KASH	KASHANI, <i>Majma' al-Furs</i>
KH	NIZAMI, <i>Khusrau u Shirin</i>
LM	NIZAMI, <i>Laili u Majnun</i>
MA	NIZAMI, <i>Makhzan al-Asrar</i>
MAS	MAS'UDI, (<i>Kitab al-muruj</i>), <i>Les Prairies d'Or</i> (tr.)
NADT	NASIR AL-DIN TUSI, <i>The Nasirean Ethics</i> (tr.)
NAKH	NAKHJAVANI, <i>Sahah al-Furs</i>

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NKH	NASIR-I KHUSRAU, <i>Safar Nama</i>
QAS	QASIM ABU NASRI, <i>Irshad al-Zira‘at</i>
QAZ	QAZWINI, <i>‘Aja‘ib al-Makhluqat</i> (Persian tr.)
RAD	RASHID AL-DIN, <i>Asar wa Ahya‘</i>
REL	(<i>Kitab al-tami min akhbar al-Sind wa ‘l-Hind</i>), <i>Relation de la Chine et de l’Inde</i> (tr.)
SN	NIZAMI, <i>Sharaf Nama</i>
TAB	TABRIZI, <i>Burhan-i Qat‘i</i>
YAQ	YAQUT, <i>Le Dictionnaire</i> (tr.)

Preface

The contents of this book are based on my doctoral thesis, which I presented in French in October 1997 at the Université Libre de Bruxelles (ULB). In order to transform this research into a book which might be read by specialists but also by those who have no particular knowledge of Nizami's work, I had to rearrange several of its chapters, considerably abridging the body of the text and the footnotes. In particular, I decided to leave out the comprehensive catalogue of *baits* and the footnotes listing all the references in the sources on which the identification process in chapter 3 is based. The new chapter 3 is much lighter but hopefully it has kept its interest, and some of the exhaustive research on which it is based and which may be found in the original thesis still remains. Other passages, notably the last part of the doctoral thesis on art history and the chapter presenting and analysing the contents of the scientific sources used in this research, have been left out completely. In the interval, the research around and about Nizami has continued and several articles and some very important monographs have been published by colleagues¹ (and also by myself on the poet's scientific knowledge), the results of which I have not been able to include in this book as, understandably, this would have meant more and deeper reshaping and adapting of its contents than was possible.

As this work was originally written in French, many of the general background references have been taken from literature written in this language. I decided to keep these, as it seemed pointless to go over the general works again to find equivalent references in English. Although this is a work about Nizami's poetry, I also decided to make very little reference to the existing

¹ Such as, for example, J.S. Meisami's *Structure and Meaning in Medieval Arabic and Persian Poetry* and A. Seyed-Gohrab's *Layli and Majnun. Love, Madness and Mystic Longing in Nizami's Epic Romance*. Full detail of all works cited in the notes is given in the bibliography.

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secondary literature on the poet. The reason is that this research is detached from the literary analysis of the *Khamsa* stories and characters. It appeared unnecessary to cite or refer to the bulk of the contemporary or past research on the poet which does not approach the verses from the present work's technical angle.

The kind friends who have helped me during the years of my doctoral research and those who agreed to proofread this manuscript are too numerous to be thanked here separately, though I could not leave out special mention of the encouragement and help received from such colleagues and Nizami-friends as Hushang A'lam, Hans de Bruijn, Christoph Buerger, Peter Chelkowski, Julie Scott Meisami, Ziva Vesel and naturally my former teachers at the ULB. They all know how indebted I am to each one of them, although I express my gratitude here in a global manner. And, naturally, I claim responsibility for any mistake this book may contain.

The following reference system is used for the verses from Nizami's *Khamsa*: The edition which was used is the *Kulliyat-i Khamsa-yi Nizami Ganjavi*, ed. Vahid Dastgirdi, Tehran, 1372 H.² The two initials refer to the *masnavi*: MA for *Makhzan al-Asrar*; KH for *Khusrau va Shirin*; LM for *Laili va Majnun*; HP for *Haft Paikar*; SN for *Sharaf Nama* and IN for *Iqbal Nama*. These initials are then followed by the chapter number given in the edition and by the line number. A complete list of all the verses containing references to the trees and fruit studied here has been added in the appendices, as well as the citation of all the relevant verses in each *masnavi*. I elected for my translations to remain as close as possible to the Persian text, at the cost of sacrificing any ambition to present an English poetical version. I hope I have not betrayed Nizami's sophisticated language, or misrepresented his meaning. When in doubt I have tried to explain what the problems are and why the proposed translation is unsure.

I have opted for citing the verses in their original Persian. Any terms in transliteration follow a simplified system based on that proposed in the Journal *Iran*, but the diacriticals have been left out. As most terms are well known or also appear in their original script at first mention, it has been assumed that readers will have no problems in correctly identifying these in the body of the text.

This study is presented within a diachronic framework, which follows the evolution of the treatment of a Persian poetical theme through the centuries, with the help of a precise repertoire of the

² Though I was made aware that this edition has shortcomings, my research was at the time too advanced to use another edition, such as the Baku one.

motifs and images used by poets. It continues the thematic studies by C.-H. de Fouchécour on eleventh-century Persian poets and by J. Ehlers on Firdusi's language.³ These two works address the imagery of nature in all its component elements, while the present work is limited to the study of trees and their fruit. The complete list of verses mentioning trees and fruit in the Nizami *Khamasa*, to be found in appendices 3 and 4, continues the concordance work. However, this inventory is but the first step, forming a corpus of *bait*s referring to trees. In turn, it is the basis of a detailed investigation into the level of scientific knowledge which can be found in the poetical images of Nizami. This consists of a comparison of the poetical mentions of trees and fruit with medieval scientific works in order to recognise the scientific allusions wherever they may be uncovered in Nizami's text.

This book shies away from unravelling the mystical metaphors and symbolisms which are so important in Persian verse. This is an entirely different domain. My search for Nizami's scientific knowledge regarding trees and fruit is structured as follows: Firstly (chapter 3), an investigation into "hidden scientific allusions". These are cases where the poet does not explicitly indicate that a scientific knowledge is required to understand his verse, but, in order to be understood properly, the allusions he makes about the nature, the needs, the aspect of a given tree or fruit, do require at least some knowledge of these plants. Secondly (chapter 4), an investigation into "explicit scientific allusions". For the comprehension of these a specialist knowledge is required. It is probable that Nizami hoped that these latter allusions would be recognised by his readers and appreciated as sophisticated and specialised knowledge. An important question deriving from this last point is whether today, we can tell apart specialised scientific knowledge from *adab*, the cultured knowledge of the man about town in Nizami's time. Is this medieval poet's knowledge of trees a reflection of "science" or of "vulgarisation"?

The concept of a medieval period is essentially European. It may be used for the oriental world, and more specifically here for the Islamic world, only if properly qualified. Indeed, history in the Orient has not followed the pattern of evolution of the Western world. It is generally agreed that in the countries which occupy us here, those under Islamic domination, the "Middle Ages" start around the second or third century AD and end either in 1492 or

³ C.-H. de Fouchécour, *La Description de la Nature dans la Poésie Lyrique Persane du XI^e siècle. Inventaire des thèmes*; J. Ehlers, *Die Natur in der Bildersprache des Shahname*.

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during the sixteenth century, marked by the emergence of three great empires, the Ottoman, the Safavid and the Moghul. The twelfth century when Nizami was writing the poems we study here, is thus well within the medieval period as defined above, whatever *terminus* date is adopted.

Finally, this research is not about whether Nizami's knowledge of trees is exact according to the modern botanical understanding, but rather about how much knowledge of the science of his time he possessed. Modern botany is only used in chapter 3 where I attempt to identify the Persian names of trees and fruit.