There has been a tendency in many forms of religious discourse to asso-
ciate religion primarily with the nonmaterial realm of extramundane
considerations and experiences, especially beliefs about God or “the Ulti-
mate” variously understood, timeless truths about eternal realities, and
experiences that lie beyond the realm of ordinary human awareness. This
tendency has remained remarkably tenacious despite numerous attempts
by religious studies scholars to unseat it. It can be traced to the origins
of contemporary religious studies in Enlightenment-era Protestant theol-
ogy with its emphasis on belief and doctrine as the defining elements of
religion. The field of religious studies continues also to be influenced by
early phenomenological categories and approaches to religion scholar-
ship, with their emphases on, for example, “the Holy” or “the Sacred”
as categories that reside, ultimately, outside of history and the material
realm. As Dick Houtman and Birgit Meyer have recently observed about
the origins of the academic study of religion,

Wasn’t the opposition between spirituality and materiality the
defining characteristic of religion, understood as geared to a
transcendental “beyond” that was “immaterial” by definition?
Grounded in the rise of religion as a modern category, with
Protestantism as its main exponent, this conceptualization
entails the devaluation of religious material culture—and
materiality at large—as lacking serious empirical, let alone
theoretical interest. (Houtman and Meyer 2012, 1)
An overriding emphasis on ideas, beliefs, theologies, and doctrines as the essence of religion persists in a widespread discursive practice of equating “religion” with “faith” and speaking of individuals as “members of the (Buddhist, Jewish, Hindu, and so forth) faith” and promoting “interfaith dialogue” as a means of bridging differences among religiously diverging groups.

The devaluation of the material realm in the study of religion is reinforced within critical academic religious studies scholarship by approaches that elevate texts and the ideas contained therein as the most favored objects of serious scholarly inquiry. This kind of textualism has now extended beyond the written word to include approaches to various nonliterary religious phenomena as, metaphorically speaking, simply other kinds of texts to be deciphered using the same methods of textual interpretation in which earlier generations of religion scholars indulged uncritically and unproblematically (c.f. Vaquez 2011, 15).

Thomas Csordas observes that textualism has become, if you will, a hungry metaphor, swallowing all of culture to the point where it becomes possible and even convincing to hear the deconstructionist motto that there is nothing outside the text. It has come to the point where the text metaphor has virtually . . . gobbled up the body itself. . . . I would go so far as to assert that for many contemporary scholars the text metaphor has ceased to be a metaphor at all and is taken quite literally. (Csordas 1999, 146, quoted in Vasquez 2011, 15)

It is not at all our intention in this book to argue that there is anything inherently problematic with studying religious texts, doctrines, or ideas, or with approaching non-textual phenomena as metaphorical texts. But it is our intention to call into question the normativity of such approaches in the academic study of religion, moving to the margins of religious studies to focus our attention squarely not on ideas, beliefs, texts, or words, but instead on stuff. Here we join a growing movement of scholarly interest in material religion, a movement that fixes its gaze on visuality, materiality, and embodiment as vital religious categories. Focusing on materiality in the study of religions “signals the need to pay urgent attention to a real, material world of objects and a texture of lived, embodied experience” (Houtman and Meyer 2012, 4). Methodologically, moving beyond a textual approach to religious phenomena requires also engaging a more practice-centered approach to religion,
one that demands placing the objects of our inquiry “in their contexts of production, circulation, and consumption” (Vasquez 2011, 255).

A move toward taking “the material” seriously in humanistic and social scientific scholarship was given an enormous boost by trends in culture studies, beginning primarily in the 1980s, that called for more sustained academic consideration of the cultural dynamics surrounding material objects. Works like Arjun Appadurai’s seminal edited volume *The Social Life of Things: Commodities in Cultural Perspective* (1988) or Mihaly Csikszentmihaly and Eugene Rochberg-Halton’s *The Meaning of Things: Domestic Symbols and the Self* (1981) helped focus attention on the nature of “things” as highly significant, and often shifting or complex, loci of meaning, identity, and culture. The idea that “objects have ‘social lives’” helped engender new hermeneutical possibilities based on the premise that “in modern societies, where meanings and interpretations attached to images are relatively flexible and fluid, objects have careers or trajectories whereby their meaning for consumers changes over time and space” (Woodward 2007, 29). Thus emerged a newly invigorated, interdisciplinary field of material culture studies that has generated interest over the last few decades across a wide swath of disciplines in the humanities and social sciences. Ian Woodward notes of this “material turn”:

The fundamental conviction of material culture studies is that objects do matter for culture and society. . . . Not only do we constantly engage with objects in a direct, material way, we also live in a world where objects are represented as images and have global mobility. This means that understanding the ‘social lives’ (Appadurai, 1986; Kopytoff, 1986) of objects is one of the keys to understanding culture. (Woodward 2007, 28)

Religious studies as a field of academic inquiry has begun to be marked by this material turn. Books like Colleen McDannell’s *Material Christianity* (1998), David Morgan’s *Piety: A History and Theory of Popular Religious Images* (1998), Elisabeth Arweck and William Keenen’s *Materializing Religion* (2006), Manuel Vasquez’s *More Than Belief: A Materialist Theory of Religion* (2011), and Houtman and Meyer’s *Things: Religion and the Question of Materiality* (2012), for example, have helped establish both the importance and the legitimacy of focusing scholarly attention on religious objects, highlighting the role they play in religious life. The creation of a journal in 2005 called *Material Religion* is a further indication of the extent to which the academic study of religion has in the last ten
years come to take material culture increasingly seriously (see http://www.bergpublishers.com/us/material/material_about.htm).

The study of Asian religions has also turned its gaze toward the material realm. In the first half of the twentieth century, there was a penchant in American and European cultures for representing the religions of Asia, especially Hinduism and Buddhism, as contemplative, otherworldly religions concerned primarily with spiritual matters. The rising popularity in the United States since the 1960s of meditation and yogic practices—which engage the body but do so largely as a way of involving the whole self in processes that are ultimately about spiritual transformation—has often helped perpetuate this stereotype; and popular culture and media have sometimes tended to juxtapose, crudely, Western materialism with Eastern spiritualism. During the last few decades, however, changes in the academic study of religion in general and the study of South Asian religions in particular have helped draw more attention to forms of religiosity, including South Asian religiosity, that are concretely embodied in temples, pilgrimage practices, icons, amulets, religious objects, works of art, clothing, and so forth. In his book, *The Impact of Buddhism on Chinese Material Culture* (2003), for example, John Kieschnick argues that Asian religious material culture has been overlooked, and he devotes his efforts in this book to examining and analyzing the impact of Buddhism on material religious culture in China. In the study of Indian religions in particular, books like Diana Eck’s *Darśan: Seeing the Divine Image in India* (1998), Richard Davis’s *The Lives of Indian Images* (1999), and Jacob Kinnard’s *Imaging Wisdom: Seeing and Knowing in the Art of Indian Buddhism* (1999) have done the same kind of thing, especially in relation to icons and other kinds of visual images employed in Indian religious practices.

In keeping with this growing interest in the complex and multivalent significances of things, this book examines material objects in South Asian religions in their regional, institutional, and ritual diversity. The chapters explore how, within the context of South Asian religious and cultural pluralism, objects embody, influence, create, exemplify, and shape the worlds of religious participants. Our focus here is on objects that have come to play vital roles in contexts we consider to be self-evidently religious in some way: these objects are, for example, worshiped, used, or displayed in religious buildings, settings, and practices, or for purposes that one typically recognizes as religious. Objects are not removed from cultural, historical, social, or political processes and trends but instead are deeply embedded and implicated in them, residing at the crossroads of cultural and religious vectors. Objects also have agency. They do not function simply as passive repositories of cultural
meanings; instead, they may actively shape meaning, human activity, and social relations in diverse contexts depending on the varying ways they are engaged, manipulated, and interpreted.

Houtman and Meyer note the existence of a gap between “the promise of concreteness that makes the turn to ‘things’ and the notion of ‘materiality’ appear so attractive, on the one hand, and our still rather meager understanding of and lack of agreement about what we mean by ‘matter’ and ‘materiality on the other” (4). Rather than venture too deeply into this quagmire about definitions, I note here that we agree with Arthur Asa Berger who observes, “Scholars may argue about definitions of material culture. Generally speaking, we can say that if you can photograph it and it isn’t too large and complicated, we can consider it to be an example of material culture” (Berger 2009, 16). For purposes of this volume, to speak of material religion is to speak of particular, photographic (following Berger) objects that are deployed in some way in religious contexts. We explore collectively a range of traditions, including Hinduism (including yoga and diaspora Hinduism), Buddhism, Islam, Jainism, and Catholicism. We readily acknowledge the limitations of the term “religion” and the constructed nature of the “isms” named above and yet use these terms as useful starting points from which to launch our analyses. By examining material culture across a variety of South Asian religions, this volume helps highlight which aspects of material religious culture might seem to be shared and which might be distinctive to particular contexts and hence not necessarily part of a shared cultural base.

The first five chapters of this book focus on objects that serve as either iconic or non-iconic forms of deity or divine power across religious lines as dynamic embodiments of (sometimes conflicting) spheres of meaning and social relations. In chapter 1, “The Icon of Yoga: Patañjali as Nāgarāja in Modern Yoga,” Stuart Ray Sarbacker focuses on an increasingly ubiquitous image (mūrti) of the sage Patañjali, the semi-mythical founder of yoga, found in yoga centers and yoga studios throughout the international yoga community. Although this icon has several key variations, the most commonly found image is of Patañjali in a half-human, half-serpent (nāga) form. This form is often said to represent the conception of Patañjali as an incarnation of Ādiśeṣa, the auspicious Serpent-King associated with the Hindu deity Viṣṇu. What is striking about this icon is its recent rise to international prominence despite being relatively uncommon in India. Sarbacker argues that this image demonstrates the transformation or transfiguration of a particular element of South Indian Hindu culture into a symbol for the international phenomenon of yoga through the vehicle of the “yoga diaspora.” He
examines the broader culture of the icon and the religious narratives that inform how it is interpreted in its native context in comparison to that of contemporary yoga movements. He further argues that the Patañjali icon resides at intersections between narratives that are at times in competition and at other times mutually interwoven.

While Sarbacker’s chapter examines the icon of Patañjali in a global context, the second chapter, John E. Cort’s “God’s Eyes: The Manufacture, Installation, and Experience of Eternal Eyes on Jain Icons,” focuses on the ornamentation of Jain icons in temple settings in Gujarat, North India. There are two main divisions of Indian Jainism: Śvetāmbara and Digambara. Śvetāmbara icons of Jinas, Jain “saints,” have external eyes of glass, crystal, or enamel affixed to their faces, whereas Digambara icons do not. Exploring this material difference leads Cort to a consideration of central issues in Jain sectarian identity concerning the definition of the Jina and the relationship of Jains to icons of the Jina. Śvetāmbara Jains have criticized external eyes on the grounds that they harm icons, detract from religio-aesthetic experience of the icon, or signify a wrong understanding of the nature of the liberated Jina. Cort’s essay focuses on the ways that the production and display of Jain icon eyes intersect with issues of community formation and identity in North India with respect to not only Śvetāmbara and Digambara Jains, but also the producers of the eyes (who happen to be Hindus and Muslims) and the “consumers” (Śvetāmbara Jains).

Chapter 3, Mathew N. Schmalz’s “North Indian Materialities of Jesus,” explores the ways images of Jesus are deployed at the Catholic Mission at Shantinagar in Eastern Uttar Pradesh (North India), an institution that is now fifty years old. During the 1960s, a new picture of Jesus was placed at the entrance to the mission’s church in which Jesus is in the full lotus position, wearing the ochre robe of a traditional Hindu renunciant. The picture was designed to reflect Catholic adaptation to North Indian culture, but for the indigenous Catholic population, which consisted largely of untouchable manual laborers, this image of Jesus seemed disengaged from the world and stood in sharp contrast to the material concerns of the mission itself. Indigenous Catholics favored instead two other images of Jesus. The first was a light-skinned Jesus who was often presented as a larger-than-life cardboard cutout and placed on the stage for Catholic charismatic healing services. This Jesus spoke the language of the charismatic movement, a language that emphasizes not only the embodied nature of human being, but also the material prosperity brought by faith in Christ. The second image was a colorized version of the negative photo of the shroud of Turin—often taken to be an image of Jesus Christ himself. This image is housed in
a chapel at a Catholic ashram in Varanasi to which Catholics of the Shantinagar mission often make pilgrimage. They bring offerings such as fruit, rice, and money and place them before the image, often bowing in reverence. Materiality thus is the primary medium through which these Catholics engage Jesus, not only to obtain favor but also to rid themselves of inauspiciousness. This chapter examines these different modes of “materiality” and what they reflect about the dynamics of Catholicism, inculturation, and untouchability in North India.

The next two chapters explore not icons per se, but rather aniconic representations of deities as they come to life in specific devotional contexts.

Chapter 4, Neelima Shukla-Bhatt’s “Celebrating Materiality: Garbo, a Festival Image of the Goddess in Gujarat,” explores material dimensions of the garbo ritual dance. In the lunar month of Ashvin (September/October), the Hindu festival of Navarātri or “nine nights” is celebrated with much fanfare in honor of the great goddess of the Hindu tradition. In the state of Gujarat, in western India, the chief component of the celebration is a worship dance, garbo, that has been prevalent in the region since at least the seventeenth century CE. It is traditionally performed by women at night around a festival icon of the goddess, a round, perforated clay pitcher in which a lamp is kept lit for the duration of the festival. The image is called garbo, a word linked to Sanskrit garbha (“fetus” or “womb”), and represents the cosmic womb of the goddess containing the divine light of life. But songs for the dance are also called garbo, as is the dance itself. Due to its popularity, garbo is now a part of popular culture even as it continues to be a religious form and performance. Since the female body is closely linked to materiality in Hindu cultures, and since popular culture is often expressed through material objects, garbo serves as a lens through which one may examine materiality in South Asian religions. This chapter examines the links among the materials used in garbo, the goddess as the cosmic mother, and the dancing bodies of women. It draws on symbolic meanings of clay pitchers in Indic traditions, Hindu theological concepts that identify the goddess with matter, and theories of dance in which “kinetic qualities of movement” convey knowledge.

My chapter, “The Goddess’s Shaligrams,” explores understandings of two special shaligram stones and the role they play in the context of an American temple called the Parashakthi, or Eternal Mother, Temple. Established in 1999, the Parashakthi Temple sits on sixteen acres of wooded land in Pontiac, Michigan. The Divine Mother worshipped in this temple is the Tamil goddess Karumariamman, “Black Mariamman,” who, it is claimed, has manifested herself both in the village of
Thiruverkadu, just outside Chennai in Tamil Nadu, and at the Parashakthi temple in Pontiac. A beautiful icon of Divine Mother occupies center stage at the temple, yet since the temple’s founding in 1999, many additional deities have been installed. In 2008, the spiritual director of the Parashakthi Temple, Dr. Krishna Kumar, brought to the temple from India two shaligram stones. Shaligram stones are understood broadly in the Hindu tradition as natural manifestations of Viṣṇu, but they play a different role at the Parashakthi Temple. According to Kumar, these particular shaligram stones are extraordinary, mystical, powerful objects whose arrival at the temple was orchestrated by Divine Mother herself for a specific purpose. This chapter asks a series of questions about the stones: How did shaligram stones, normally associated with devotion to Vishnu, come to play an important role at a temple nominally dedicated to the Divine Mother? What significance is normally attached to shaligram stones, and how is this meaning reconstituted in the context of the Parashakthi temple in Michigan? And by exploring these questions, what might we learn about the religious significance of materiality and material objects at this particular Hindu goddess temple?

The last four chapters of the book shift away from iconic and aniconic embodiments of divinity to focus on other religious objects, especially as they are deployed in contexts of ritual practice. James McHugh explores the shifting meaning of camphor in his chapter, “The Camphor Flame in an Age of Mechanical Production.” Camphor, a white, pungently fragrant, crystalline substance, has long been a highly valued material in South Asian culture. It is used in traditional Indian medicine (Āyurveda) and is also an important ingredient in traditional perfumes and incenses. References to camphor abound in Sanskrit literature. But for many people, the context most strongly associated with the use of camphor in South Asia is religion, since one of the most conspicuous uses of camphor in India (as well as in Hindu religious contexts outside India) is in pūjā rituals of worship. McHugh explores the ways that camphor’s religious and cultural significance, as well as its social meanings and uses, served as powerful forces in changing the mode of production of camphor from a system of forest production and trade to an industrial chemical process. What camphor is at any place and time is conditioned by a network of social, technological, institutional, discursive, economic, and, in this case, even theological factors.

In chapter 7, “Metal Hands, Cotton Threads, and Color Flags: Materializing Islamic Devotion in South India,” Afsar Mohammad observes that normative versions of Islam strictly prohibit all types of external markers or objects that signify devotion. However, various public ritual performances of living Islam in South Asia highlight the use of metal
icons, flags, and materials like sacred red threads. These objects are deeply implicated in the construction of local Islamic devotion as they produce and sustain context-specific meanings, narratives, and ritual practices among Muslims in Andhra Pradesh, South India. This chapter explores the multiple uses and meanings of ritual objects within the ritual settings of Muharram and ‘urs and in the ritual practices of faqīrī and offerings of rags, flags, and cradles. The very use of these objects has become contentious throughout South Asia as a new wave of Islamic reformism strives aggressively to remove these kinds of Islamic objects from public spaces.

Bradley Clough’s chapter, “Monastic Matters: Bowls, Robes, and the Middle Way in South Asian Theravāda Buddhism,” explores the role that monks’ bowls and robes have played in the religious lives of Theravāda Buddhists in South Asia. Looking primarily at the monastic code of Theravāda Buddhism, the Vinaya Piṭaka of the Pāli Canon, Clough examines the greater meanings that these items have had in this tradition, meanings that go well beyond ideas concerning the well-being of monastics’ bodies and stomachs. Among the Vinaya’s minutiae regarding the use of the robes and bowls one finds rules applied to their usage that address many of Buddhism’s central values. Clough argues that Theravāda Buddhism has employed regulations concerning the use of the robes and bowls in order to inculcate in monks many central principles of the religion’s “middle way,” such as equanimity, mindfulness, detachment, and generosity.

The final chapter of the book, Selva J. Raj and Corinne Dempsey’s “Letting Holy Water and Coconuts Speak for Themselves: Tamil Catholicism and the Work of Selva Raj,” is co-authored because Raj, who was originally to be a co-editor on this volume, died very suddenly of a heart attack in March of 2008, and Dempsey graciously volunteered to step in and finish his chapter. Lay devotional religion in South Indian Catholicism centers around ritual actions and performances executed with the aid of material objects at pilgrimage sites and popular shrines. While these actions may be carried out throughout the year, lay involvement is particularly prominent during religious festivals. The material objects used at such occasions include a wide variety of votive objects, such as coconut, sandal paste, neem tree leaves, fruits, flowers, and body facsimiles in silver, aluminum, and gold. Even a cursory look would convince one of the striking uniformity in the votive objects used by South Asian religious practitioners, whether Hindu, Christian, or Muslim. This essay explores the patterns, logic, and grammar of a shared material religious culture that serves as a metaphor for the culture of dialogue that defines South Indian religious practice. Raj and Dempsey...
argue that the spontaneous, grassroots dialogue, manifest in the ritual lives of ordinary lay practitioners, emerges organically from their material culture and lived experiences. This is qualitatively different than the more orchestrated forms of interreligious ritual dialogue advocated by the religious elite.

What do we learn by reading these essays in conjunction with one another as a collective scholarly effort? What themes and patterns seem to emerge, and what larger issues for further consideration do these varied chapters seem to raise? Here I would like to conclude by highlighting three themes I glean from these pages as they pertain to what, in the contexts we explore, religious objects mean, what they do, and what they embody.

First, together these chapters expose a dynamic between continuity and discontinuity of discursive meaning that religious objects may carry from context to context. Shukla-Bhatt argues in her chapter, for instance, that the garbo’s core meaning, equating the universe with the divine, serves as an important and stable “point of departure” for the varied and divergent additional meanings it engenders across a diversity of ritual arenas. Sarbacker, similarly, argues that the image of Patañjali as Nāgarāja or “Serpent-King” in modern forms of yoga, while a modern image strongly tied to the Krishnamacharya yoga tradition of Southern India and its prominent disciples, nonetheless “serves as a vehicle for drawing the various threads of yoga tradition together with modern intellectual and bodily cultures.” Other authors, however, emphasize the dynamic, contingent, and often shifting meanings that objects assume in relationship to particular contexts, be they geographical, historical, social, devotional, representational, or economic. McHugh, for example, notes of camphor that “the changing mode of production of camphor is closely tied to its changing religious significance,” and that these changes have profound economic implications concerning camphor’s value. And I note in my essay that in Michigan, shaligram stones become the province of the Goddess, not Vishnu, as they most often tend to be in more traditional Hindu contexts. Exploring what objects mean entails exposing and probing both continuities and divergences across time and space. Meaning can and does change, although it is not necessarily categorically unstable.

In addition to meaning things, however, religious objects also do things. Religious objects have power to shape the worlds they inhabit. Read together, these chapters offer a range of insights about what objects in South Asian religions are capable of doing, especially with respect to human relationships. Schmalz observes that the images of Jesus he explores in his chapter, for example, instantiate “particular relationships
of giving, receiving, and exchange,” and Cort probes “the role of material culture in the formation, maintenance and division” of North Indian Jain communities. In this regard, objects function in some contexts to help build social cohesion and solidarity between different religious or social groups; in other contexts, however, they can instigate or promote social or political conflict between or among groups. Hence Dempsey and Raj observe that, in South India, the use of religious objects in Catholic ritual indicates that “the power and flexibility of a range of ritual objects, whether traditionally Hindu or Catholic, potentially used by an array of practitioners, is foundational to the interreligious exchanges—and intra-religious tensions—that structure lay Catholic rituals at rural shrines.” Raj observes how slivers of coconut blessed by a Hindu deity but consumed gleefully by a South Indian Catholic boy can serve as a site of exchange that transcends religious difference. Mohammad, on the other hand, highlights the nature of objects like battle standards, flags, and ritual threads as sites of identity conflict and differentiation among different Muslim groups. Objects can help produce a sense of collective identity or tradition even as innovation occurs, as McHugh and Sarbacker argue about camphor and Patañjali icons, respectively. Or they can generate anxiety as sites of potential conflict, like the robes and bowls that Clough describes as carrying the potential to materialize feelings of attachment and greed, or the eyes on Jain icons that Cort notes as a mark of distinction between Digambara and Śvetāmbara Jains.

Finally, in addition to meaning and doing, objects in South Asian religions—like other examples of material culture—embody histories. They evince the marks of past worlds. As Igor Kopytoff famously noted in “The Cultural Biography of Things”—and as other scholars have since emphasized—objects have biographies (Kopytoff 1986; c.f. Davis 1999), and exploring an object’s biography “can make salient what might otherwise remain obscure” (Kopytoff 1986, 67). Kopytoff observes:

In doing the biography of a thing, one would ask questions similar to those one asks about people: What, sociologically, are the biographical possibilities inherent in its ‘status’ and in the period and culture, and how are these possibilities realized? Where does the thing come from and who made it? What has been its career so far and what do people consider to be an ideal career for such things? What are the recognized ‘ages’ or periods in a thing’s ‘life,’ and what are the cultural markers for them? How does the thing’s use change with its age, and what happens to it when it reaches the end of its usefulness? (Kopytoff 1986, 66–67)
Hence, for example, Clough explores the multiple “biographical possibilities” inherent in Buddhist monks’ bowls and robes by delineating their changing religious status over time. With regard to where things come from and who makes them, Cort and Mohammad document how the objects they examine in their chapters are sometimes not even made by Jains and Muslims, respectively, complicating their identity as religious objects. My chapter examines the biography of the Goddess’s shaligrams that their unique biography gives them a unique form of power not shared by similar shaligram stones. Regarding different “ages” or “periods” in a thing’s life, McHugh examines how camphor’s story changes over time in response to changes in use and market demand, for example, and Sarbacker traces the development of the “Serpent-King” icon of Patañjali. As Sarbacker notes, religious objects can exemplify “the complexity and multidimensionality of cultural flow.” Digging into the stories of religious objects often unearths social vectors beyond the realm of what we ordinarily think of as religion.

Almost all of the chapters in this volume address in some way different opinions—within and between traditions, cultures, and locations—about the “ideal” career of the highlighted objects. By way of contrast, none addresses directly the question that Kopytov raises about what happens to an object when it comes to the end of its usefulness. Perhaps our lack of concern with “endings” signals our collective sense that the serious study of material religion in South Asian traditions is really just at the beginning stages. The deployment of material items in a plethora of South Asian religious, cultural, regional contexts shows no sign of waning. It is worth our while to begin paying closer attention.

Note

1. I am deeply grateful to Corinne Dempsey for her help in revising and refining this introduction.

References


Introduction


