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АНГЛИЙСКИЙ ЯЗЫК
ДЛЯ АСПИРАНТОВ
И МАГИСТРАНТОВ

Учебное пособие

Курс 2016

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Федеральное государственное бюджетное
образовательное учреждение высшего образования
«Юго-Западный государственный университет»
(ЮЗГУ)

В. И. Егорова, Л. В. Левина

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Учебное пособие

*Утверждено Учебно-методическим советом
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Учебное пособие соответствует Федеральному государственному образовательному стандарту РФ для всех направлений подготовки магистратуры и аспирантуры.

Представлены задания для развития навыков чтения, перевода, аннотирования, реферирования иноязычного неадаптированного текста для аспирантов и магистрантов, а также профессионально ориентированного общения. Работа содержит оригинальные тексты, опубликованные в современных англоязычных изданиях.

Предназначено для аспирантов и магистрантов при изучении дисциплин «Иностранный язык», «Профессиональный иностранный язык», «Деловой иностранный язык», «Технический перевод».

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ПРЕДИСЛОВИЕ

Основная цель представленной работы – дальнейшее развитие и совершенствование навыков чтения, перевода, аннотирования и реферирования неадаптированной литературы по направлению подготовки, а также речевого умения научно-профессионального общения. Выбранное направление является актуальным ввиду того, что открывается возможность подготовки к сдаче кандидатского экзамена не только в ходе аудиторных занятий, но и самостоятельно. Необходимо отметить и то, что данное пособие может использоваться и молодыми учеными при работе с оригинальной литературой по специальности и при составлении на английском языке аннотаций к научным статьям, написании докладов для участия в конференциях разного уровня.

Пособие рассчитано на 50–70 часов аудиторных занятий и 100 часов самостоятельной работы и написано в соответствии с требованиями ФГОС РФ и программой по иностранным языкам и профессиональному иностранному языку для аспирантов и магистрантов.

Особенности данного пособия – наличие в нем сведений о теории и практике перевода, аннотирования и реферирования англоязычного текста, а также творческих заданий, направленных на развитие у будущих научных работников коммуникативно-речевых навыков (таких, как дискуссия, подготовка и выступления на научной конференции).

Пособие состоит из 4 частей. В первой части основное внимание уделяется сведениям по теории и практике перевода, они являются необходимым введением к проработке последующих частей пособия. Во второй части представлены тексты по специальности, взятые из оригинальной литературы исторического, социологического и других профилей. В третьей части содержатся тестовые задания, которые идентичны тестам, предлагаемым в ходе сдачи кандидатского минимума по английскому языку. Последняя часть посвящена исследовательской работе и ее презентации.

Издание предназначено для аспирантов и магистрантов при изучении дисциплин «Иностранный язык», «Профессиональный

иностранный язык», «Деловой иностранный язык», «Технический перевод».

Авторы выражают искреннюю благодарность доктору филологических наук, профессору кафедры иностранных языков и профессиональной коммуникации ФГБОУ ВО «Курский государственный университет» *О. С. Зубковой* и кандидату филологических наук, завкафедрой иностранных языков ГБОУ ВПО КГМУ Минздрава России, доценту *И. Ф. Шамаре* за сделанные ими ценные замечания, указания и рекомендации.

ВВЕДЕНИЕ

Наблюдение за педагогическим процессом, беседы с аспирантами и магистрантами неязыковых вузов показали, что значительной проблемой при самостоятельной подготовке к сдаче кандидатского минимума по английскому языку является отсутствие пособия, в котором были бы адекватно отражены все аспекты экзамена, а именно: перевод оригинальной литературы по направлению подготовки, беседа по теме научной работы, выполнение тестовых заданий на понимание текста как по профилю специальности, так и научно-популярного характера. Авторы попытались решить эту проблему, представив настоящее пособие, положив в его основу современный подход к учебному процессу по иностранному языку, предполагающий не только чтение и перевод литературы по специальности, но и решение коммуникативных задач и навыков профессионально ориентированного общения. Структура и содержание пособия, а также методика подачи учебного материала предполагают последовательность формирования развития соответствующих компетенций.

В первой части большое внимание уделяется многозначности и многофункциональности слов, терминам и некоторым другим языковым явлениям. Учебные тексты второй части составлены на основе оригинальных материалов, опубликованных в современных англоязычных изданиях. Работа над данным материалом способствует накоплению терминологического словаря. В третьей и четвертой частях, посвященных научно-исследовательской работе, содержатся полезные рекомендации по подготовке к научным дискуссиям.

Следует отметить, что данное пособие может быть использовано в ходе самостоятельной подготовки к сдаче кандидатского минимума по английскому языку, а также сдаче зачета по дисциплине «Профессиональный иностранный язык».

Part I. TEXT (THEORETICAL PART)

Периодика. Что это такое?

С каким потоком информации на иностранных языках сталкивается современный специалист? В мире ежегодно издается более 100 тысяч научно-технических журналов на 60 языках. Пишется около миллиона статей, регистрируется более 400 тысяч патентов; пишется более 250 тысяч научных отчетов. Ежегодно выпускается 200 тысяч наименований книг, 50% научно-технической литературы издается на языках, с которыми не знакома большая часть ученых. Например, статьи по химии печатаются в 6 тысячах периодических изданий на 36 языках.

Научно-техническую информацию, поступающую к нам, можно разделить на три потока:

1) *патентная литература*, являющаяся основной формой обмена, так как все новое в области науки и техники официально оформляется в виде патента и его производных форм;

2) *периодика*, специально предназначенная для обмена научно-технической информацией, например: отраслевые бюллетени, содержащие рефераты, аннотации, названия, отраслевые научно-технические журналы, содержащие дискуссионные, проблематичные и отчетные статьи специального характера, библиографические указатели с названием тем, изобретений и предметов промышленной продукции, также иногда содержащие аннотации и тематические обзоры работ по данной отрасли;

3) *различные периодические и непериодические издания* и другие источники информации, не предназначенные специально для научно-технического обмена, но которые могут быть использованы для этой цели, например: специальные журналы и книги, рекламные материалы, инструкции и другие подобные источники специальной информации.

В зависимости от практической ценности поступающие к нам в процессе обмена материалы обрабатываются по-разному. Вся практически используемая информация обычно обрабатывается в форме полного письменного перевода, являющегося основной формой технического перевода. Информация, накапливаемая по

определенной системе в качестве справочного и подсобного материала, а также так называемая сигнальная информация обрабатываются в форме сокращенных видов технического перевода (таких, как реферативный перевод, перевод заголовков и т. д.). Отсюда следует, что технический переводчик должен практически знать все виды обработки первичной информации, а также иметь в своем распоряжении определенную сумму специальных знаний, позволяющих в процессе перевода совершить переход из области старого, уже известного, в область нового, неизвестного, составляющего основное содержание оригинала. Это последнее обстоятельство является причиной весьма распространенного мнения о том, что технический переводчик должен знать технику, быть компетентным специалистом в своей области, инженером.

Типы научного текста

При всем разнообразии и неравноценности степеней сложности научного текста можно выделить определенные типы или разновидности текста. Так на основании учета определенных исходных параметров для характеристики научного текста ученые выделяют семь наиболее употребительных типов научного текста:

1. *Краткий информативно-дескриптивный* (например, аннотация, реферат статьи, краткая рецензия, заключение главы).

2. *Полный описательно-повествовательный*, узкоспециальный (например, специальная статья с описанием экспериментов, методик и т. д.).

3. *Сокращенный* (с компрессией) *описательный*, узко- и широкоспециальный (например, определитель, сводка, справочник).

4. *Полный* (повествование – описание – рассуждение) *широкоспециальный*, так называемый «нейтральный», или академический, научный стиль (например, общая статья, учебник, монография).

5. *Полный повествовательно-описательный*, узко- и широкоспециальный (например, обзорная статья по истории исследования, исторические тексты и т. п.).

6. *Развернутое свободное рассуждение* (например, часть общетеоретической статьи или монографии широкоспециального или общенаучного плана).

7. *Развернутая полемика* (например, часть общей статьи или монографии).

Естественно, что каждый тип имеет свою, присущую ему специфику. Так, например, при конкретном содержании научного произведения, описательном способе изложения и узкой специализации тематики степень повторяемости единиц будет неизбежно высокой. Это приводит к определенному стандарту или шаблону текста и дает высокую степень предсказуемости его структуры и употребляемых конструкций. В частности, в полном варианте конкретно-описательно-повествовательной разновидности (тип 2) можно предсказать явное преобладание временных форм страдательного залога: *Present Indefinite Passive*, *Present Perfect Passive*, *Past Indefinite Passive*, субъектного инфинитивного оборота, герундия в функции обстоятельства, причастных оборотов, тогда как в другом типе текста (конкретно-повествовательно-описательном, тип 5) мы почти не встретим страдательного залога, а преобладающими временными формами будут *Past Indefinite Active* и *Past Perfect Active*.

Особенности технического текста

Основной стилистической чертой научно-технического текста является точное и четкое изложение материала при почти полном отсутствии тех выразительных элементов, которые придают речи эмоциональную насыщенность, главный упор делается на логической, а не на эмоционально-чувственной стороне излагаемого.

Автор научно-технической статьи стремится к тому, чтобы исключить возможность произвольного толкования существа трактуемого предмета, вследствие чего в научной литературе почти не встречаются такие выразительные средства, как метафоры, метонимии и другие стилистические фигуры, которые широко используются в художественных произведениях для придания речи живого, образного характера.

Авторы научных произведений избегают применения этих выразительных средств, чтобы не нарушить основного принципа научно-технического языка – точности и ясности изложения мысли.

Это приводит к тому, что научно-технический текст кажется несколько суховатым, лишенным элементов эмоциональной окраски.

Правда, нужно отметить, что при всей своей стилистической отдаленности от живого разговорного языка, богатого разнообразными выразительными средствами, научно-технический текст все же включает в себя известное количество более или менее нейтральных по окраске фразеологических сочетаний технического характера, например:

in full blast	<i>Полной тягой</i>
the wire is alive	<i>Провод под током</i>
the wire is dead	<i>Провод отключен</i>

Это, не лишая текст точности, сообщает ему известную живость и разнообразие.

С точки зрения словарного состава основная особенность текста заключается в предельной насыщенности специальной терминологией, характерной для данной отрасли знания.

Термином мы называем эмоционально-нейтральное слово (словосочетание), передающее название точно определенного понятия, относящегося к той или иной области науки или техники.

Терминологическая лексика дает возможность наиболее точно, четко и экономно излагать содержание данного предмета и обеспечивает правильное понимание существа трактуемого вопроса.

В специальной литературе термины несут основную семантическую нагрузку, занимая главное место среди прочих общелитературных и служебных слов.

В отношении синтаксической структуры английские тексты научно-технического содержания отличаются своей конструктивной сложностью. Они богаты причастными, инфинитивными и герундиальными оборотами, а также некоторыми другими книжными конструкциями, которые подчас затрудняют понимание текста и ставят перед переводчиком дополнительные задачи.

Поскольку научно-технический текст насыщен терминами, несущими основную нагрузку, мы рассмотрим вопросы терминологии несколько подробнее.

В обычной речи слова, как правило, полисемантически, т. е. они передают целый ряд значений, которые могут расходиться порой довольно широко.

Возьмем для примера сумму значений слова **table**, которые концентрируются вокруг стержневого понятия «плоскость»:

стол	скрижаль
доска	таблица
плита	табель
дощечка	плоскогорье

Наряду с этим слово **table** обладает и рядом переносных значений, сохраняющих известную, хотя и более отдаленную, связь со стержневым понятием:

общество за столом
еда (то, что подается на стол)
надпись на плите

Такая многозначность слов в общелитературном языке является фактором, свидетельствующим о богатстве языковых изобразительных средств.

Лексическая многозначность придает речи гибкость и живость и позволяет выражать тончайшие оттенки мысли.

Иначе обстоит дело в научно-техническом языке; в нем главным требованием оказывается предельная точность выражения мысли, не допускающая возможности различных толкований.

Поэтому основным требованием, предъявляемым к термину, становится однозначность, т. е. наличие только одного раз навсегда установленного значения.

Фактически далеко не все термины удовлетворяют этому требованию даже в пределах одной специальности, например:

engine	машина, двигатель, паровоз
oil	масло, смазочный материал, нефть

Это обстоятельство, конечно, представляет известное затруднение для точного понимания текста и осложняет работу переводчика.

Каковы источники возникновения английской научно-технической терминологии?

Наибольшую группу составляют термины, заимствованные из иностранных языков или искусственно созданные учеными на базе главным образом латинского и греческого языков, по мере развития науки и техники и появления новых понятий.

Так, например, в 1830 г. появилось название нового инертного вещества – *paraffin* от латинского *parum affinis*, т. е. *мало соприкасающийся* (с другими веществами).

В 1850 г. Либих создал новое соединение путем окисления спирта. Он назвал его *aldehyde*, соединив первые части латинских слов:

alcohol dehydrogenatum

Иногда возникали и гибридные образования вроде *haemoglobin* от греческого *haima* *кровь* и латинского *globus* *шар*.

Особенно много терминов появилось в Англии в XVIII и XIX вв. в период бурного развития наук, при этом часть терминов из языка ученых стала проникать в общелитературный язык и сделалась всеобщим достоянием. К таким словам относятся:

dynamo, barograph, ozone, centigrade, cereal, gyroscope, sodium, potassium и др.

В XX веке возникли такие новообразования, как:

penicillin, hormone, isotope, photon, positron, radar, biochemistry, cyclotron и т. д.

Эти термины быстро стали общепонятными благодаря тесной связи новейших научных открытий с повседневной жизнью.

Все же нужно отметить, что основная масса научно-технической терминологии продолжает оставаться за пределами

общелитературного языка и понятна лишь специалисту данной отрасли знания.

Вторая по величине группа терминов представляет собой общелитературные английские слова, употребляемые в специальном значении. К таким словам относятся, например:

jacket	куртка и вместе с тем кожух
jar	кувшин и конденсатор
to load	нагружать и заряжать

При этом встречается употребление одного слова в разных специальных значениях, в зависимости от отрасли знания; слово **rocket** – карман, например, имеет следующие специальные значения:

воздушная яма (в авиации)
окружение (в военном деле)
мертвая зона (в радио)
гнездо месторождения (в геологии)
кабельный канал (в электротехнике)

В структурном отношении все термины можно классифицировать следующим образом:

1. *Простые термины* типа: oxygen, resistance, velocity.
2. *Сложные термины*, образованные путем словосложения. Составные части такого термина часто соединяются с помощью соединительного гласного:

gas + meter = gasometer

При этом иногда происходит усечение компонентов:

turbine + generator = turbogenerator

ampere + meter = ammeter

3. *Словосочетания*, компоненты которых находятся в атрибутивной связи, т. е. один из компонентов определяет другой:

direct current	<i>постоянный ток</i>
barium peroxide	<i>перекись бария</i>

Нередко атрибутивный элемент сам выражен словосочетанием, представляющим собой семантическое единство. Это единство орфографически часто выражается написанием через дефис:

low-noise penthode	<i>малошумный пентод</i>
doubling-over test	<i>испытание на сгиб</i>

4. *Аббревиатура*, т. е. буквенные сокращения словосочетаний:

e.m.f. = electromotive force *электродвижущая сила*

Сокращению может подвергнуться часть словосочетания:

D.C. amplifier = direct current amplifier	<i>усилитель постоянного тока</i>
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5. *Слоговые сокращения*, превратившиеся в самостоятельные слова:

loran (long range navigation)	<i>система дальней радионавигации «Лоран»</i>
radar (radio detection and ranging)	<i>радиолокация</i>

6. *Литерные термины*, в которых атрибутивная роль поручается определенной букве вследствие ее графической формы:

T-antenna	<i>T-образная антенна</i>
V-belt	<i>клиновидный ремень</i>

Иногда эта буква является лишь условным, немотивированным символом:

X-rays	<i>рентгеновские лучи</i>
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При переводе терминов мы можем встретиться со следующими моментами:

1) часть терминов, имеющих международный характер, передается путем транслитерации и не нуждается в переводе:

antenna	<i>антенна</i>
feeder	<i>фидер</i>
blooming	<i>блюминг</i>

2) некоторые термины имеют прямые соответствия в русском языке и передаются соответствующими эквивалентами:

hydrogen	<i>водород</i>
voltage	<i>напряжение</i>

3) известная часть терминов при переводе калькируется, т. е. передается с помощью русских слов и выражений, дословно воспроизводящих слова и выражения английского языка:

single-needle instrument	<i>однострелочный аппарат</i>
superpower system	<i>сверхмощная система</i>

4) нередко случается, что словарь не дает прямого соответствия английскому термину. В этом случае переводчик должен прибегнуть к описательному переводу, точно передающему смысл иноязычного слова в данном контексте:

video-gain	<i>регулировка яркости отметок от отраженных сигналов</i>
combustion furnace	<i>печь для органического анализа</i>
wall beam	<i>балка, уложенная вдоль поперечной стены</i>

При переводе терминов следует по возможности избегать употребления иноязычных слов, отдавая предпочтение словам русского происхождения:

<i>промышленность</i>	<i>вместо индустрия</i>
<i>сельское хозяйство</i>	<i>вместо агрикультура</i>
<i>полное сопротивление</i>	<i>вместо импеданс и т. д.</i>

Поскольку характерной чертой термина является четкость семантических границ, он обладает значительно большей самостоятельностью по отношению к контексту, чем обычные слова.

Зависимость значения термина от контекста возникает лишь при наличии в нем полисемии, т. е. если в данной области знания за термином закреплено более одного значения.

Особенности перевода технических текстов

В то время как основная трудность перевода художественной прозы заключается в необходимости интерпретации намерений автора, т. е. в передаче не только внешних фактов, но и в сохранении психологических и эмоциональных элементов, заложенных в тексте, задача, стоящая перед переводчиком научно-технического текста, лишенного эмоциональной окраски, оказывается более простой – точно передать мысль автора, лишь по возможности сохранив особенности его стиля.

Для того чтобы правильно понять научно-технический текст, надо, как уже указывалось ранее, хорошо знать данный предмет и связанную с ним английскую терминологию.

Кроме того, для правильной передачи содержания текста на русском языке нужно знать соответствующую русскую терминологию и хорошо владеть русским литературным языком.

Перевод с помощью словаря незнакомых однозначных терминов (типа **oxygen, ionosphere**) не представляет затруднений.

Иначе обстоит дело, когда одному английскому термину соответствует несколько русских, например:

switch	<i>выключатель</i>
	<i>переключатель</i>
	<i>коммутатор</i>

В этом случае сознательный выбор аналога может диктоваться лишь хорошим знанием данного предмет.

Возьмем предложение:

Most of the modern radio-transmitters can communicate both telegraph and telephone signals.

Переводчик, основательно не знакомый с радиоделом и соответствующей русской терминологией, перевел бы это предложение так:

Большинство современных радиопередатчиков может посылать как телеграфные, так и телефонные сигналы.

Однако технически грамотный перевод должен быть следующим:

Большинство современных радиопередатчиков может работать как в телеграфном, так и в телефонном режиме.

Основными чертами русского научно-технического стиля являются строгая ясность изложения, четкость определений, лаконичность формы.

При переводе английского текста переводчик должен полно и точно передать мысль автора, облакая ее в форму, присущую русскому научно-техническому стилю, и отнюдь не перенося в русский текст специфических черт английского подлинника.

Для иллюстрации остановимся на некоторых стилистико-грамматических особенностях английского текста, чуждых стилю русской научно-технической литературы:

1. В английском тексте преобладают личные формы глагола, тогда как русскому научному стилю более свойственны безличные или неопределенно-личные обороты, например:

You might ask why engineers have generally chosen to supply us with a.c. rather than d.c. for our household needs.

We know the primary coil in the ordinary transformer to have more turns than the secondary one.

Можно спросить, почему для домашних надобностей обычно используется переменный, а не постоянный ток.

Известно, что первичная обмотка обычного трансформатора имеет больше витков, чем вторичная.

2. В английских текстах описательного характера нередко употребляется будущее время для выражения обычного действия.

Руководствуясь контекстом, следует переводить такие предложения не будущим, а настоящим временем, иногда с модальным оттенком:

The zinc in the dry cell accumulates a great many excess electrons which will move to the carbon electrode.

Fig. 10 gives a drawing of a bulb; the filament will be seen in the centre.

Цинк в сухом элементе аккумулярует большое число избыточных электронов, которые движутся к угольному электроду

На рис. 10 приводится чертеж электрической лампы; нить накала видна в центре.

3. В английских научно-технических текстах особенно часто встречаются пассивные обороты, тогда как в русском языке страдательный залог употребляется значительно реже.

При переводе, следовательно, мы нередко должны прибегать к замене пассивных конструкций иными средствами выражения, более свойственными русскому языку.

Предложение

This question was discussed at the conference.

можно перевести следующими способами:

Этот вопрос был обсужден на конференции.

Этот вопрос обсуждался на конференции.

Этот вопрос обсуждали на конференции.

Конференция обсудила этот вопрос.

4. Авторы английской научно-технической литературы широко используют различные сокращения, которые совершенно неупотребительны в русском языке, например:

d.c. (direct current)

a.c. (alternating current)

s.a. (sectional area)

b.p. (boiling point)

постоянный ток

переменный ток

площадь поперечного сечения

точка кипения и др.

Такие сокращения в переводе должны расшифровываться и даваться полным обозначением.

5. Некоторые слова или выражения в английском тексте содержат чуждый нашему языку образ. При переводе они должны заменяться аналогами, т. е. выражениями, соответствующими по смыслу, но более обычными для русского текста, например:

We have learned to manufacture dozens of construction materials to substitute iron.

Вместо **dozen** (*дюжина*) в русском языке обычно в таких случаях употребляется слово *десяток*, поэтому это предложение мы переводим следующим образом:

Мы научились производить десятки строительных материалов, заменяющих железо.

Реферирование иностранного текста

В практической деятельности технических специалистов часто возникает необходимость ознакомления с обширными по объему иностранными материалами, перевод которых занимает много времени. В этом случае прибегают к краткому изложению содержания этих материалов – составлению реферата (*summary*). Реферат как экономное средство ознакомления с материалом отражает его содержание с достаточной полнотой. Реферат не только раскрывает важные стороны содержания, но и показывает читателю, имеет ли для него смысл полностью или частично проштудировать данный источник информации в оригинале.

Составление рефератов (реферирование) представляет собой процесс аналитико-синтетической переработки первичного документа, при котором во вторичном документе – реферате – излагается основное содержание первичного документа, приводятся данные о характере работы, методике и результатах исследования, а также о месте и времени исследования.

Объектом реферирования является преимущественно научная, техническая и производственная литература. На остальные виды публикаций, как правило, составляются только аннотации и библиографические описания.

Различие между аннотацией и рефератом определяется их назначением. Аннотация предназначена только для информации о существовании первичного документа определенного содержания и характера, а реферат служит для изложения основного содержания первичного документа.

Содержание и структура реферата

Реферат состоит из следующих элементов:

- 1) заглавия реферата;
- 2) библиографического описания реферируемого документа;
- 3) текста реферата.

Заглавием реферата, как правило, служит заглавие реферируемого документа. Если заглавие документа не отражает основного смыслового содержания этого документа, то дается другое, более точное (смысловое) заглавие.

В тексте реферата отражаются следующие данные:

- исследуемая проблема, цель, главная мысль и содержание работы, предмет или цель исследования;
- данные о методике и ее сравнительной точности (при этом широко известные методы не отмечаются);
- выводы автора и указание возможностей и путей практического применения результатов работы;
- ссылка на наличие библиографии и иллюстративного материала (если их нет в библиографическом описании);
- технология, применяемое оборудование и условия проведения исследования;
- таблицы, схемы, графики, формулы, необходимые для уяснения основного содержания документа;
- необходимые справочные данные (об авторе, истории вопроса, месте проведения исследования и т. д.).

В соответствии со спецификой реферируемого документа в реферате могут содержаться не все эти данные, а какая-то их часть.

Реферирование – это сложный, творческий процесс, построенный на проникновении в сущность излагаемого. В процессе реферирования происходит не просто сокращение текста, а существенная переработка содержания, композиции и языка оригинала:

- в содержании выделяется главное и излагается сокращенно, сжато;
- однотипные факты группируются, и им дается обобщенная характеристика;
- цифровые данные систематизируются и обобщаются;
- если основная мысль сформулирована недостаточно четко, она должна быть конкретизирована и выделена в реферате;
- в случае необходимости происходит перемещение временных планов в последовательности от прошлого к будущему;
- язык оригинала претерпевает изменение в сторону нормативности, нейтральности, простоты и лаконичности. Исключаются образные выражения, эпитеты, вводные слова, несущественные определения, обстоятельства, дополнения. Происходит разукрупнение сложных синтаксических конструкций, сокращение количества придаточных предложений, замена их более простыми оборотами.

Информативность как основное содержание жанра реферата как бы «просачивается» через все языковые элементы и их значения и в то же время соединяет их в цельную структуру.

Реферирование – это также сложное комплексное умение, состоящее из целого ряда отдельных элементов.

Ниже представлена схема чтения текста, которая научит вас производить смысловой анализ текста и отбирать материал в соответствии с блоками схемы (рис. 1).

На протяжении всего курса обучения английскому языку вы выполняли многие упражнения, нацеленные на отработку этих элементов. Это:

- 1) выделение абзацев, содержащих основную информацию;
- 2) выделение основных мыслей, фактов, положений;
- 3) озаглавливание выделенных абзацев;
- 4) составление плана статьи;
- 5) сокращение текста;
- 6) передача содержания текста своими словами (перифраз).



Рис. 1. Блок-схема для реферирования текста

Итак, расчлняя текст на смысловые куски, вы учились анализировать содержание; озаглавливание этих кусков и составление плана учило синтезировать отдельные элементы текста; сокращение текста формировало навык отделять основное от второстепенного; перифраз учил передавать одну и ту же мысль разными средствами.

Аннотирование иностранного текста

Сущность и назначение аннотаций

Сущность аннотации заключается в том, что она дает предельно сжатую характеристику материала, излагая содержание оригинала в виде перечня основных вопросов и иногда давая критическую оценку. Она имеет чисто информационное или справочно-библиографическое назначение. Аннотация (abstract), в отличие от реферата (summary), не раскрывает содержание материала, а лишь сообщает о наличии материала на определенную тему, ука-

зывает источник и дает самое общее представление о его содержании. Аннотация должна дать читателю предварительное представление о незнакомой ему публикации и тем самым помочь ему в поиске необходимой информации.

Виды аннотаций

Различают два типа аннотаций – *справочные* (описательные) и *рекомендательные*.

Справочные аннотации имеют наибольшее распространение в научно-информационной деятельности и особенно при аннотировании публикаций, изданных на иностранном языке. Справочные аннотации предназначены для быстрого и беглого просмотра, поэтому краткие аннотации предпочтительнее подробных. Для справочных аннотаций характерно сочетание конкретности и достаточной полноты с определенным лаконизмом изложения.

Рекомендательные аннотации имеют целью не только дать предварительное представление о документе, но также и заинтересовать читателя и показать место данной публикации среди других публикаций на аналогичную тематику. Основное назначение рекомендательной аннотации – оценка документа.

Требование сжатости и лаконичности, предъявляемое к справочной аннотации, не имеет для рекомендательной аннотации особого значения. В рекомендательной аннотации должны органически сочетаться характеристика содержания аннотируемого произведения с характеристикой автора, разъяснением значения и сущности трактуемых вопросов, их актуальности и интереса.

Ярким примером различий между справочными и рекомендательными аннотациями могут служить следующие две аннотации на книгу М. Гарднера «Теория относительности для миллионов»¹, изданную в русском переводе:

1. *Справочная аннотация*: «Популярное изложение специальной и общей теории относительности».

2. *Рекомендательная аннотация*: «Вот уже на протяжении полувека ученые и писатели, философы, математики пытаются до-

¹ Гарднер М. Теория относительности для миллионов. М.: Атомиздат, 1967 г.

вести до широких масс, не искушенных в науке, сущность теории относительности Эйнштейна. За это время вышли в свет сотни книг, но до сих пор эта теория представляет немалые трудности для популяризации.

И вот перед вами книга американского физика М. Гарднера. Прочитав ее, можно с уверенностью сказать, что книга будет понятна всем, начиная со школьников старших классов.

Преимуществом книги является, конечно, то, что в ней отражены новые взгляды на те проблемы, которые полвека назад выглядели совсем иначе, в частности на строение Вселенной.

О мастерстве популяризации говорит и такой факт: на всю книжку приведены всего две простейшие формулы. А ведь нам известно, что неотъемлемый атрибут Эйнштейна – "математические джунгли", через которые не всегда может пройти даже специалист физик.

Достоинством книги являются и прекрасные иллюстрации. Ни одна популярная книга по теории относительности не была столь искусно иллюстрирована».

Структура аннотации

Аннотация, как правило, состоит из *трех частей*:

- 1) вводная (сюда входят все выходные данные);
- 2) текст аннотации (описание основных положений работы);
- 3) заключительная часть (вывод составителя аннотации).

Текст справочной аннотации обычно включает следующие сведения:

- тему аннотируемого документа, характеристику его проблематики и основного содержания, основные выводы автора;
- вид аннотируемого документа (книга, диссертация, справочник, статья и т. п.);
- назначение аннотируемого документа;
- задачи, поставленные автором аннотируемого документа;
- метод, используемый автором (при аннотировании научных и технических публикаций);
- сведения об авторе (авторах);
- характеристику вспомогательных и иллюстративных материалов, включая библиографию;

– характеристику новизны, оригинальности проблем, рассматриваемых в аннотируемом документе, а также теоретической и практической ценности аннотируемой работы и др.

Требования, предъявляемые к аннотациям

Аннотации не стандартизированы. Общие требования, которые необходимо учитывать при составлении аннотаций, особенно справочных, сводятся к следующим:

1) композиция аннотаций должна быть логичной и может расходиться с композицией аннотируемого документа;

2) язык аннотации должен быть лаконичным, простым и ясным, без длинных и сложных периодов. Нередко справочные аннотации состоят всего из нескольких названных предложений;

3) отбор сведений для аннотации и порядок их следования зависят от характера аннотируемого документа и от назначения аннотации.

Рассмотрим схему написания аннотации (рис. 2).



Рис. 2. Схема написания аннотации

Слова и словосочетания для пересказа и реферирования текста

данная статья	the present paper
тема	the theme (subject-matter)
основная проблема	the main (major) problem
цель	the purpose
основной принцип	the basic principle

проблемы, связанные с аналогично	problems relating to; problems of similarly; likewise
поэтому, следовательно, в результате этого	hence; therefore
наоборот	the contrary
тем не менее	nevertheless; still; yet
кроме того	besides; also; again; in addition; furthermore
сначала	at first
далее, затем	next; further; then
наконец, итак	finally
вкратце	in short; in brief

Цель написания статьи

1. The object (purpose) of this paper is to present (to discuss, to describe, to show, to develop, to give) ...
2. The paper(article) puts forward the idea (attempts to determine) ...

Вопросы, обсуждаемые в статье

1. The paper (article) discusses some problems relating to (deals with some aspects of, considers the problem of, presents the basic theory, provides information on, reviews the basic principles of).
2. The paper (article) is concerned with (is devoted to) ...

Начало статьи

1. The paper (article) begins with a short discussion on (deals firstly with the problem of) ...
2. The first paragraph deals with ...
3. First (At first, At the beginning) the author points out that (notes that, describes) ...

Переход к изложению следующей части статьи

1. Then follows a discussion on....
2. Then the author goes on to the problem of ...
3. The next (following) paragraph deals with (presents, discusses, describes) ...

4. After discussing ... the author *turns* to ...
5. Next (Further, Then) the author tries to (indicates that, explains that) ...
6. It must be emphasized that (should be noted that, is evident that; is clear that, is interesting to note that) ...

Конец изложения статьи

1. The final paragraph states (describes, ends with) ...
2. The conclusion is that the problem is ...
3. The author concludes that (summarizes the) ...
4. To sum up (To summarize, To conclude) the author emphasizes (points out, admits) that ...
5. Finally (In the end) the author admits (emphasizes) that ...

Оценка статьи

In my opinion (To my mind, I think) ...

The paper (article) is interesting (not interesting), of importance (of little importance), valuable (invaluable), up-to-date (out-of-date), useful (useless)...

Part II. TEXTS FOR TRANSLATION

Section 1. HISTORY

A FORGOTTEN EMPIRE

In the year 1336 A.D., during the reign of Edward III of England, there occurred in India an event which almost instantaneously changed the political condition of the entire south. With that date the volume of ancient history in that tract closes and the modern begins. It is the epoch of transition from the Old to the New.

This event was the foundation of the city and kingdom of Vijayanagar. Prior to A.D. 1336 all Southern India had lain under the domination of the ancient Hindu kingdoms, – kingdoms so old that their origin has never been traced, but which are mentioned in Buddhist edicts rock-cut sixteen centuries earlier, the Pandiyans at Madura, the Cholas at Tanjore and others. When Vijayanagar sprung into existence the past was done with for ever, and the monarchs of the new state became lords or overlords of the territories lying between the Dakhan and Ceylon.

There was no miracle in this. It was the natural result of the persistent efforts made by the Mohammedans to conquer all India. When these dreaded invaders reached the Krishna River the Hindus to their south, stricken with terror, combined, and gathered in haste to the new standard which alone seemed to offer some hope of prediction. The decayed old states crumbled away into nothingness, and the fighting kings of Vijayanagar became the saviors of the south for two and a half centuries.

And yet in the present day the very existence of this kingdom is hardly remembered in India. While its once magnificent capital, planted on the extreme northern border of its dominions and bearing the proud title of the "City of Victory", has entirely disappeared save for a few scattered ruins of buildings that were once temples or palaces, and for the long lines of massive walls that constituted its defences. Even the name has died out of men's minds and memories, and the remains that

mark its site are known only as the ruins lying near the little village of Hampe.

Its rulers, however, in their day swayed the destinies of an empire far larger than Austria, and the city is declared by a succession of European visitors in the fifteenth and sixteenth centuries to have been marvellous for size and prosperity – a city with which for richness and magnificence no known western capital could compare. Its importance is shown by the fact that almost all the struggles of the Portuguese on the western coast were carried on for the purpose of securing its maritime trade. When the empire fell in 1565, the prosperity of Portuguese Goa fell with it never to rise again.

ORIGIN OF THE EMPIRE

The city of Vijayanagar is, as already stated, generally supposed to have been founded in the year 1336, and that that date is not far from the truth may be gathered from two facts. Firstly, there is extant an inscription of the earliest real king, Harihara I or Hariyappa, the "Haralb" of Ibn Batuta, dated in A.D. 1340. Secondly, the account given by that writer of a rapid southwards by Muhammad Taghlag tallies at almost points with the story given at the beginning of the Chronicle of Nuniz, and this raid took place in 1334.

For if a comparison is made between the narrative of Batuta and the traditional account given by Nuniz as to the events that preceded and led to the foundation of Vijayanagar, little doubt will remain in the mind that both relate to the same event. According to Ibn Batuta, Sultan Muhammad marched southwards against his rebel nephew, Baha-ud-din Gushtasp, who had fled to the protection of the "Rai of Kambila", or "Kampila" as Firishtah calls the place, in his stronghold amongst the mountains. The title "Rai" unmistakably points to the Kanarese country, where the form "Raya" is used for "Rajah", while in "Kambila" we recognize the old town of Kampli, a fortified place about eight miles east of Anegundi, which was the citadel of the predecessors of the kings of Vijayanagar. Though not itself actually "amongst the mountains", Kampli is backed by the mass of rocky hills in the centre of which the great city was afterwards situated. It is highly natural to suppose that the "Rai", when attacked by the Sultan would have quitted Kampli and taken refuge in the fortified heights of Anegundi, where he could defend

himself with far greater chance of success than at the former place and this would account for the difference in the names given by the two chroniclers. Ibn Batuta goes on to say that the Raya sent his guest safely away to a neighboring chief, probably the Hoysala Ballala, king of Dvarasamudra in Maisur, then residing at Tanur. He caused a huge fire to be lit on which his wives and the wives of his nobles, ministers, and principal men immolated themselves, and this done he sallied forth with his followers to meet the invaders, and was slain. The town was taken, "and eleven sons of the Rai were made prisoners and carried to the Sultan, who made them all Musclemen". After the fall of the place the Sultan "treated the king's sons with great honour, as much for their illustrious birth as for his admiration of the conduct of their father", and Batuta adds that he himself became intimately acquainted with one of these – "we were companions and friends".

HISTORY: AFTER THE RUSSIAN CONQUEST ***(Part I)***

The concessions accorded in Russia to the Jewish traders from Bukhara helped to disseminate the notion that the situation of the Jews in the Russian Empire was good, and when Russia conquered Central Asia in 1864–1888 the Jews welcomed the Russians and even aided them, for example in the conquest of Samarkand (1868). According to the 1868 peace treaty, Bukhara, which had been decisively defeated, became a vassal of Russia and other parts of its territories, including Samarkand and several other towns with a Jewish population, were incorporated into the region (*kray*) of Turkistan, which was annexed directly to the Russian Empire. In the first few years, the Russians took several measures to gain the allegiance of Central Asian Jewry, which they regarded as the only loyal element within the native population.

The regime did not restrict Jewish autonomy, and only added to the communal structure the office of official rabbi (*kazyonny ravvin*), whose functions were similar to those of the official rabbis in other areas of the Russian Empire. The Russian-Bukharan peace treaty included three paragraphs that defined the rights of the Jews of Bukhara to live freely in Russia, to trade freely there, and to purchase real estate within its borders. In 1866 and 1872 it was decreed that the Jews of Bukhara and two other states in Central Asia, Khiva and Khuqand, or, in the

Russian pronunciation Kokand (in the former, which became a Russian vassal in 1873, there were, in effect, no Jews, while the latter was abolished in 1876 and its territory annexed directly to Russia) would be granted Russian citizenship even if they resided in these countries, on condition that they join the trade guilds in Russia (thus exempting them from the law that denied Russian citizenship to "alien" Jews).

This policy aided Bukharan Jewry in acquiring a powerful status in trade relations, both with Central Asia and in trade with central Russia. Bukharan Jews established trading companies which opened branches in the large Russian cities as well as factories for the initial processing of local products, especially cotton and silk (the most known of them—the Potilahov and the Dividov companies). The local Jewish trader and industrialist, familiar with local conditions, had the advantage in competition with his Russian counterpart who was new to the area.

At the same time the Emir of Bukhara and his government attempted to make of the Jews that remained within the borders of the kingdom scapegoats for their defeat, persecuting them and extorting money from them. These decrees resulted in the mass emigration of Jews from Bukhara to Turkistan. The Jewish population increased greatly in Samarkand, Tashkent and other cities. Fierce competition between the local Jewish tradesmen and industrialists and their Russian rivals and the movement of Jews from Bukhara to Turkistan were the main causes for the imposition of discriminatory measures against the Jews of Central Asia as early as the 1880s. In secret government circulars these measures were explained unequivocally as necessary to protect the Russian traders and industrialists and to limit the number of "native" Jews in the Turkistan region.

HISTORY: AFTER THE RUSSIAN CONQUEST (Part II)

In the year when the Russian conquest of Central Asia was completed (1888), the Russian authorities decreed the expulsion of the Jews from all the towns of the Trans-Caspian kray, which covered approximately the territory of the present-day Turkman Soviet Republic. However, implementation was postponed indefinitely for fear of damaging the interests of the Russian traders engaged in trade with the local Jews.

At the same time a decree was issued (but in a short period of time suspended) closing the synagogues in Merv. In 1887–1889 new regulations were issued that divided the Bukharan Jews who lived in the Turkistan kray, into two categories: "native Jews of the Turkistan kray", i.e., the Jews who had lived in what was now the kray before the conquest and their direct descendants, and those who could not prove that they or their ancestors were natives of the kray.

The possibility of obtaining Russian citizenship, accorded in regulations between 1866 and 1872, remained merely theoretical and its realization became very difficult. In 1892 the general governor of the Turkistan region issued a secret circular severely restricting the entry into the region of Jews residing within the boundaries of Bukhara. Czar Nicholas II himself added a note to the protocol of the government session held on November 20, 1898, defining the policy of the regime in Central Asia towards the Jews as follows:

To protect the General Governorship (region) of Turkistan and the General Governorship of the Steppes (i.e., the Kazak and Kirgiz areas conquered by Russia in the second half of the 19th century) from the harmful activities of the Jews, so long as this is possible.

However, already in 1900 it was evident that it would not be possible to implement the proscription. The authorities were confronted by the mutual responsibility of the members of the community, who protected the "aliens" in their midst and covered up for them, thus preventing the attempt to banish individuals, and even groups of Jews. The Jews were also aided by the lack of organization and the confusion in the Russian administration of the region. Moreover, the lower echelons of officialdom, whose task was to carry out these orders, often accepted bribes and ignored the presence of the "aliens." Implementation of the decree was thus postponed first till 1909 and then till 1910, and in the meantime, the chief rabbi of Turkistan, R. Salomon Tajer, intervened in this matter.

He appealed to the government, using the assistance of advocates who were well-versed in the law and wealthy Bukharan traders, and thus the town Khuqand, Marghelan, and Samarkand were added to the list of places where residence was permitted. In 1910 the committee of Count Pahlen, entrusted with the task of examining the situation in the

Turkistan region, recommended that additional decrees be issued against the Jews residing there. One of the high officials of the local regime announced publicly in that same year that the Jews are "robbers of the people" and "counterfeiters of documents."

With the outbreak of World War I, there was a violent upheaval within the Muslim population of Central Asia, that in 1916 became an open revolt which the Czarist army managed to subdue only with great difficulty. The Jewish problem thus lost some of its urgency. But even during the course of World War I, as is attested in secret documents of the period, the rulers continued to formulate decrees directed against the Jews.

The Russian conquest aided in the establishment of a stratum of tradesmen and industrialists within Bukharan Jewry that was limited in number but had significant economic power and ability to compete. Nevertheless, the new conditions brought about the impoverishment of the masses of Bukharan Jewry since the importation of the cotton and silk cloths that were produced in Russian industrial enterprises resulted in the elimination of the major occupation of the Jews of Bukhara – the dyeing of cloths. The impoverished craftsmen turned to other professions. Thus, by the end of the 19th and the beginning of the 20th century, hairdressing and shoe-shining and repairing became the almost exclusive monopoly of the Jews in Central Asia; many of them also became petty traders.

The advent of the Russian regime brought changes also in the field of education. Alongside the *khomlo* (*heder*), schools were established that taught some basic principles of secular culture. The teachers were mostly Bukharan Jews who had been educated in Jerusalem, where a Bukharan community had been established. In addition secular schools supported by the regime were established "Russian – native Jewish schools," in which the language of instruction was Russian. The first periodical in the language of the Bukharan Jews, entitled *Rahamim*, began to appear in 1910 in the town of Skobelev (now Ferghana) and continued to be published until 1916.

ANCIENT RUSSIA

People exist at certain geographical location at some historical period; as time passed by areas of human distribution and borders of states changed. Both ethnic groups and states are not eternal: they are born and perish, develop and transform in new social communities. So Russian, Ukrainian and Byelorussian people were formed on the basis of eastern Slavonic superethnic group.

Formation of people (process of ethnogeny) and formation of states have economic base closely connected with inhabitancy of people and their way of life which in its turn influenced cultural and community features of ethnic groups. Natural cradle of eastern Slavic people of the Russian state was Eastern European plain. Its open spaces, landscapes, soil and climatic conditions, river basins determined not only the formation of dominant economic and cultural complexes, population settlements but also the formation of ethnic and state frontiers according to results of armed political conflicts and colonization processes. To the middle of the first millenium A.D. there were steady economic and cultural complexes located in woods, forest-steppes and steppe zones of Eurasia; the process of ethnogeny developed actively. To VI–VII centuries the final stage of eastern slavs allocation from common pro-Slavonic unity began. The transformation of eastern Slavic cultural and ethnic community into local independent civilization was connected with the adoption of Christianity by prince Vladimir in 988.

With adoption of Christianity eastern Slavs entered Orthodox Church which determined development of the Russian state. Transformation of Kiev into the political, cultural and religious centre of eastern Slavic state resulted in gradual strengthening of cultural delimitation of the Kiev Russia relative the west slavic neighbours who adopted Christianity from Rome. Epoch of the Kiev Russia was the period of mainly southern orientation of eastern Slavic life. Russia was close to Byzantium because of religious and trade communications, to Bulgaria – because of common script.

The form of government of the Ancient Russian state included three components – veche as a special form of national assembly which discussed the most important questions; royal authority with administrative, judicial and military powers; royal council which was the assembly

of supreme administration representatives. The state was multinational from its formation. On the territory of Ancient Russia lived Finno-Ugric people – Karelians, Veps, Saams. The Perm land occupied by Komi was joined at the end of XV century.

THE FOREIGN POLICY OF ANCIENT RUSSIA (Part I)

The first widely known action of the foreign policy of the Ancient Russian state was the establishment of the embassy in Constantinople in 838 – the capital of the Byzantine Empire, the most mighty state of the Eastern Mediterranean Sea and the regions of the Black Sea. The establishment of friendly relations with the Byzantine Empire was the main trend of the Russian foreign policy. War conflicts replaced the periods of lasting peace during which military detachments hired by Russia participated quite often in wars between neighbours on the side of Byzantium. The first Russian campaign to Constantinople took place in 860. Russian troops on 200 boats appeared on the banks of the Bosphorus just at the time when Emperor Michael III was at war with the Arabs. The campaign resulted in signing a peace treaty. Soon some of the Ancient Russian nobility were Christianized.

In 907 Kiev and Novgorod prince Oleg (882–912) brought numerous troops to the capital of the Byzantine Empire by sea and by land. The troop included not only the Kiev prince's armed force but also the detachment of the Slavonic unions of tribal principalities and the Varangians – mercenaries dependent on Kiev. As for the hiring of the Varangian detachments, mainly the Sweedish Viking prince's armed forces, it went on during the whole period of the 10th – and the beginning of the 11th centuries. Some mercenaries, who became rich being in service at Kiev prince, returned home, another part of them settled in Russia, joining the Ancient Russian prince's armed force stratum, just as it was in the second half of the 9th century with the members of the Rurik prince's armed force. The campaign, during which the suburbs of Constantinople were ruined, resulted in signing a peace treaty in 907–911, advantageous for Russia. Their texts, preserved in 'The Story of Temporal Years' - the Ancient Russian chronicle of the 12th century – are the most ancient texts of the Ancient Russian diplomacy and law. According to the treaty of 907, the Russian, arriving in Byzantium to carry

on the trade, got a privileged position. The treaty of 911 brought under regulations the Russian-Byzantium relations in the wide range of political and legal problems. Besides, there were some references on 'The Russian Law' – inner legal standards of the Ancient Russian state.

In 941 Prince Igor, the successor of prince Oleg, undertook a new campaign to Constantinople. The breach of the existing treaty on the part of the Byzantines might be the reason of the campaign. Igor's troops sustained a great defeat in a sea battle. Then in the year of 944 the Russian prince together with the Pechenegs made the second attempt. This time the battle was not to be, as a new peace treaty was concluded. The text of the treaty can also be found in chronicles.

THE FOREIGN POLICY OF ANCIENT RUSSIA (Part II)

Princess Olga entertained friendly relations with the Byzantine Empire. In 946-957 (the date is not precise) she paid a diplomatic visit to Constantinople and was Christianized. But this act did not involve the Russian into mass Christianization.

Foreign policy carried out by Svyatoslav (945-972), Olga and Igor's son, was marked by great activity. But in spite of his mother's persuasions he still remained a heathen. In 964-965 Svyatoslav brought into subjection the Vyatichi, living on the Oka River, reached the Volga, destroyed the Volga Bulgaria (the Muslim state on the Central Volga and the Lower Kama). Then moving down the Volga, he fell upon the Eastern Slavs' enemy – the Khazar kaganate. This once being a mighty state fell under the attacks (the Itil and the Sarkel were conquered). Then the Nomads-Pechenegs completed the defeat. Svyatoslav also brought into subjection the North-Caucasian tribes of the Yas (the Ossets' ancestors) and the Kasog (the Adygeis' ancestors) and it gave start to a new principality on the Taman Peninsula (the Eastern region of the Azov).

In 967 Prince Svyatoslav turned the interests in his foreign policy from the East to the Balkan. Coming into an agreement with the Byzantine Emperor Nikiphor Phoka he took the field against Danube Bulgaria, won the victory and settled the Lower Danube and began threatening the Byzantine Empire. The Byzantine Diplomacy managed to send against Russia the Pechenegs, who took the opportunity of the Russian

Prince being away almost took Kiev in 968. Svyatoslav returned to Russia, defeated the Pechenegs and came back to the Danube again. Signing a treaty with Bulgarian Tsar Boris, he unleashed a war with the Byzantine Empire and crossing the Balkan intruded in Phrakia. War actions had a changeable success but in the end Byzantine Emperor John Tsimiskhy assumed the offensive, occupied Preslav, the capital of Bulgaria, and sieged Svyatoslav in Dorostol (on the right bank of the Danube).

THE ADOPTION OF CHRISTIANITY IN RUSSIA

The first knowledge about the penetration of Christianity into Russia refers to the 1-st century A.D. In the 9th century Russia adopted Christianity twice: firstly in the year of 957 in the time of Olga and then at the time of Vladimir in 988.

After Olga being christened, the Christianization of Russia began to develop rapidly. Russia entertained friendly relations with both the Byzantine Empire and the Roman Church; there was also the place for Muslims and Jews. But it was necessary to adopt Christianity for several reasons:

- It was necessary in the interests of the development of the state – to avoid isolation from the rest of the world.
- Monotheism was the essence of a single state with the monarch at head.
- Christianity made family strong and introduced new morals.
- Christianity made for the development of culture – philosophy, theological literature.
- Social stratification required new ideology (paganism – equality of rights).

Evidently, Vladimir himself thought of his life full of fratricide and depravity. Christianity could give absolution and purify a soul.

In chronicles it is said about religious missions of Muslim Volga Bulgaria and Judaic Khazaria. Islam did not gain popularity because it prohibited wine drinking. Catholicism also was not suitable as a service was conducted in Latin and Pope, but not temporal power, was at the head of the Church.

In the year of 987 Russia entered into relations with Byzantine Empire for christening. Vladimir demanded the sister of the emperor Basil II – princess Anna – to take to wife. As for the Byzantine Empire,

it required extra help to struggle against rebels. The emperor agreed to give his sister Anna in marriage to Vladimir, but Vladimir in his turn, had to become christened and put down the rising. A Russian detachment was sent to Byzantium and the rising was put down, but the Greeks were not in a hurry to fulfill the terms of the agreement on marriage. Vladimir gathered an army and in the year of 988 advanced to the center of Byzantine possessions in the Crimea – Chersonese (Korsun). The siege lasted for several months. Once from the walls under siege an arrow with a message was sent to Vladimir's camp. In the message it was said about the necessity of cutting off the water-pipe. The message was written by the priest Anastas.

Chersonese fell down and Vladimir sent couriers to Constantinople with the demand to give Anna in marriage to him. In his message he promised to become christened. It was here where he was christened as Vasily. After that he returned to Kiev, having taken icons, church plates and clergymen with him.

CHRISTINIZATION OF RUSSIA

A lot of time passed between Vladimir's christening and the Christianization of Russia. In 990 the first attempts to introduce a new faith were taken. It was met with great resistance on the part of the pagans.

Kiev was the first to become christened. The building of churches began. In Novgorod Vladimir entrusted the mission to the care of his uncle Dobrynya. But the townsmen destroyed his yard and killed his relatives. Nevertheless the revolt was suppressed. The Byzantine Empire assisted Russia in every way – e.g. in transporting books, which were carefully translated.

It took several centuries to strengthen Christianity, but the influence of paganism did not weaken. So that was the time for two religious beliefs. On the one hand people prayed in church, but on the other hand they went on celebrating pagan holidays. Thus the holiday of Kolyada (carol-singing) merged with Christmas and Shrovetide with Lent.

- The Church got lands at its disposal. As for monasteries they adhered to celibacy and withdrawal from all carnal and mundane pleasures. Father Superior was at the head of the monastery. In the course of time monasteries became trade centers and even usury.

- Becoming strong from the economic point of view, the Church began playing a great part in the political life. Some archbishops and metropolitans took part in political intrigues, but on the whole they were against intestine strife and for the unity of Russia.
- Some schools attached to Church were established. Church arts: icon painting and chronicles writing were flourished greatly.
- Moreover, princes started to charge legal proceedings, referring to family and religion, to Church.
- Assisting the development of culture and literacy Church suppressed the culture based on paganism, pursuing merry holidays of Kolyada and Shrovetide as devilish.
- Promoting economical, cultural, religious closeness with the Byzantine Empire and other orthodox states, Church was against the Roman Catholic faith, assisting the isolation from the countries of Western Europe and cultural processes, which took place there.

INTERNATIONAL WAR IN SOUTH RUSSIAN LAND

The internal war in south Russian land in 30-s of XIII century was the longest and the most violent one – the largest internal feudal strife in the history of medieval Russia. It began from the fight for Galich throne, which was passed to the son of Hungarian king according to the will of the Prince Mstislav Udaloy (died in 1228).

In 1233-1234 Daniil Romanovich Volynsky in alliance with Kiev prince Vladimir Rurikovich waged war against Hungarians, who were in the alliance with Chernigov Prince Mikhail Vsevolodich. In 1234 Daniil conquered Galich.

Next year Mikhail Chernigovsky with Izyaslav Mstislavich (most probably the son of Mstislav Udaloy) began military operations against Vladimir and Daniil, who couldn't have captured Chernigov and returned to Kiev. At the same time Izyaslav brought Polovtsy forces to Russia. Near Kiev Daniil and Vladimir were defeated, Vladimir was captured by the Polovtsy, and Izyaslav became the Prince of Kiev. Mikhail went to Galich land and captured Galich.

Vladimir was freed soon and became the Prince of Kiev again. But it wasn't possible for him to remain on the throne, so Vladimir and Daniil invited Novgorod Prince Yaroslav Vsevolodich to Kiev. Mikhail Chernigovsky had been the enemy of Yaroslav since long time –

in 1229–1232 they had fierce struggle for Novgorod throne. In 1236 Yaroslav settled in Kiev. At the same time in Galich there was continuous war between Mikhail and Izyaslav on one side and Daniil and his brother Vasilke on the other side.

In winter of 1237–1238, Northeastern part of Russia was invaded by Baty's armies. The great Prince of Vladimir Yury Vsevolodovich (the elder brother of Yaroslav) was killed in the battle. In spring of 1238 Yaroslav left Kiev, went to the ruined Vladimir-Suzdal land and occupied the Vladimir throne. Mikhail made use of his enemies having weakened and captured Kiev, leaving his son Rostislav to reign in Galich. But Daniil managed to reconquer Galich the next year.

In the autumn of 1239, Mongol-Tatars ruined the land of Mikhail – Chernigov principality, and began to threaten Kiev. In winter of 1239–1240 Yaroslav began campaign to the south of Russia. Mikhail left Kiev right away, ran to Hungary, thus losing everything he had. Rostislav Mstislavich ascended the throne, but Daniil soon dethroned him and settled Dmitry, his boyar, in Kiev. It was the eve of Baty khan campaign to Kiev.

During the internal war Russian princes exhausted their force. This and their dissociation played negative role in the face of coming Mongol-Tatar invasion.

MONGOLIAN INVASION

In 1237–1241 Russian lands underwent a fierce attack from the Mongolian Empire – central Asian state, that conquered enormous territory of Euroasian continent from the Pacific ocean to Central Europe in the first part of XIII century. Mongols were called Tatars in Europe, by the name of one tribe that led nomadic life near the border with China. Chinese extended the name on all the Mongolian tribes, and the name "Tatars" defining Mongols extended to other countries, though Tatars were almost completely destroyed at the creation of the Mongolian Empire.

In 1206 Temujin (Temuchin) who accepted the name of Chingiskhan, was proclaimed the great Khan of all Mongols. During next 5 years Mongolian forces, united by Chingiskhan, conquered

neighbouring lands and by 1215 had conquered North China. In 1221 Chingiskhan's army conquered Middle Asia.

First conflict between ancient Russia and Mongols was in 1223, when Mongolian army of 30.000 people came to Black sea steppes after defeating Alans and Polovtsy. Polovtsy asked Russian princes for help. And the united army of the three strongest Russian princes: Mstislav Romanovich of Kiev, Mstislav Svyatoslavich of Chernigov and Mstislav Metislavich of Galich, began the campaign against Mongolian tribes.

On May 31, 1223 at the battle on Kalka river (near the Azov sea) Russian-Polovtsy army was defeated because of uncoordinated actions. Six Russian princes were killed, three princes (including the prince of Kiev) were captured and then brutally killed. Thus, Russia for the first time experienced the military power of Mongolian Horde.

After the death of Chingiskhan, the founder of the Mongolian Empire (1227), Mongolian nobility decided to begin aggressive campaign against Europe according to Chingiskhan's will. Baty-khan, the grandson of Chingiskhan, headed the united army of the Mongolian empire. His first commander was Subedey, the outstanding Mongolian military leader who participated in the battle at Kalka.

A year after the beginning of the campaign, on conquering Volga Bulgaria, Polovtsy, lands of Burtas and Mordovia on the middle Volga in the late autumn of 1237, Baty's basic forces concentrated on Voronezh river preparing the invasion on Northeast Russia. Baty's horde consisted of 140.000 soldiers, and Russian princes could gather only 100.000 people from the whole Russian land, princes of Northeast Russia could gather not more than 30.000 people.

Internal wars that had been going on for decades hampered the formation of united Russian army. So, princes could resist the invasion only one by one. In the winter of 1237, Baty's horde ruined Ryazan principality, burned the capital and killed all the population. Then, in January of 1238, Mongols defeated the army of Vladimir-Suzdal land, captured Moscow and Suzdal. On February 7 they captured Vladimir. On March 4, 1238, on Siti river (upper Volga) they defeated the army of great prince Yury Vsevolodich who was killed in the battle.

The inhabitants of Kozelsk, a small town on Zhizdra river, did really a heroic feat of arms: for 7 weeks they managed to have been fighting with Mongols supporting the defense of their town. But the forces were obviously not equal. In May of 1238 Baty captured the town and in anger ordered to raze the town to the ground and kill all the people.

The summer of 1238 Baty spent in steppes near Don, restoring strength for future campaigns. In spring of 1239 he destroyed Pereyaslavl principality, in autumn – Chernigov-Seversk land.

In the autumn of 1240 Baty's army went to Europe through the south Russia. In September they surrendered Kiev where Galich prince Daniil Romanovich reigned. South Russian princes still hadn't managed to organize the defence of their lands from Mongolian threat. After severe struggle Kiev was captured in 1240. Then Mongol Horde ruined almost all towns of south Russia in December of 1240 – January of 1241.

In the spring of 1241 conquering the Galich-Volyn land, Baty entered Poland, Hungary, Czechia, and then came to the borders of North Italy and Germany. But the army didn't get reinforcement, had significant losses and in the end of 1242 had to return to the steppes of low Volga. here they founded the westmost ulus of the Mongolian Empire – the so called Golden Horde.

GOLDEN HORDE: PROSPERITY AND FALL

Golden Horde is the feudal state based in the beginning of 1240s of the XIII century, led by khan Baty (1236–1255), the son of khan Dzhuchi. The authority of khans of Golden Horde reached territory from low Danube and Finland gulf in the west up to basin of Irtysh and low Ob on the Volga, from the Black, Caspian and Aral seas and Balkhash lake Balkhash in the south up to the Novgorod lands in the north. However the original Russian lands were not included territorially into the Golden Horde, and were in vassal dependence on it, they rendered tribute and submitted to orders of khans. The centre of Golden Horde was the Low Volga region, where at the time of Baty's reign the city of Saray-Batu (near modern Astrakhan) became the capital.

Golden Horde was an artificial and fragile state association. The population of Golden Horde was various. In settled areas Volga Bul-

gars, Mordovians, Russians, Greeks etc. lived. Turkic tribes Polovtsy (Kipchaks), Kanglys, Tatars, Turkmen, Kirghiz etc. constituted the basic part of nomads. The level of public and cultural development of the population of Golden Horde was also various. Among the nomadic population half-patriarchal, half-feudal relations dominated, in the areas with settled population - feudal relations.

After the conquests accompanied with monstrous destructions and human victims, an overall objective of Golden Horde governors was a robbery of the enslaved population. It was achieved by severe exactions. The basic part of the lands and pastures was concentrated in the hands of Mongolian feudal nobles for the benefit of which the labour population bore duties.

In the head of the state there were khans from the family of Baty. In especially important cases of political life kurultays – congresses of military and feudal nobles led by the members of the ruling dynasty, were summoned. Beklyare-bek supervised over state affairs (prince above princes), Vezirs - over separate branches. In cities and areas subordinated to them Darugs were sent, their main duty was taxation. Frequently alongside with Darugs, military leaders – Baskaks were appointed. The state system carried half-military character since military and administrative posts, as a rule, were not divided. Members of the ruling dynasty took the most important posts – Tsarevitches ("Oglans", owning lands in Golden Horde and occupying posts in the head of the army).

Fragile character of the state association of Golden Horde and especially growth of emancipating struggle of captured and dependent peoples became the main reasons of disintegration and destruction of Golden Horde. Already at its formation Golden Horde was divided into Uluses, belonging to 14 sons of Dzhuchi: 13 brothers were half-independent sovereigns, submitting to the Supreme authority of Baty. Tendencies to separate appeared after the death of khan Mengu-Timur (1266–82) when feudal war between tsarevitches of Dzhuchi family began. At the time of Tuda-Mengu (1282–87) and Talabug (1287–91) the actual governor of the state became Nogay. Only khan Tohte (1291–1312) managed to get rid from Nogay and his supporters.

In 5 years a new distemper began. Its termination connected with the name of Uzbek khan (1312–42); at his time and the time of his suc-

cessor Dzhani-bek khan (1342–57) Golden Horde reached the maximal rise of military power. Military forces at Uzbek totaled up to 300 thousand people. However distempers, that began in 1357 with the murder of Dzhani-bek, testified the beginning of its disintegration. From 1357 till 1380 on the Golden Horde throne had been more than 25 khans. In 1360–1370s the actual governor became Mamay. In the beginning of 1360s of XIV century Khorezm separated from Golden Horde, Poland and Lithuania grasped the lands in the river basin of Dnepr, Astrakhan separated. Mamay had to face the amplified union of Russian principalities led by Moscow. The attempt of Mamay to weaken Russia by the organization of a huge extortionate campaign again resulted in the defeat of Tatars by the incorporated Russian armies in Kulikovo Battle of 1380. At the time of khan Tohtamysh (1380–95) distempers stopped, and the central authority began to supervise the basic territory of Golden Horde. Tohtamysh in 1380 crushed Mamay's army on the Kalka river, and in 1382 went to Moscow, captured it and burnt. After strengthening the authority he acted against Timur. As a result of some devastating campaigns Timur defeated Tohtamysh's armies, grasped and destroyed Volga region cities, including Saray-Berke, plundered cities of Crimea etc. Golden Horde couldn't recover any more after such a blow.

RUSSIAN CULTURE IN THE PERIOD OF THE MONGOL-TATAR INVASION

The development of Russian culture didn't suffer such destructive changes as a whole, as those in the social – political field after the Invasion and the establishment of the Horde's dominion. However, the results of the Tatar raids were the great material and cultural losses. The growing dissociation of the Russian lands in the middle of XIII century adversely affected the development of the all-Russian cultural processes. Just after the establishment of the Horde domination, stone-building was temporarily stopped. The number of art crafts was lost (production of goods of niello and grain, porcelain, etc.) The production of manuscripts was reduced. The chroniclers' outlook was noticeably constricted. They almost lost interest to the events taking place in other principalities. At the same time the folklore art: epics, songs, legends, and warrior's stories, – was rapidly developing and became the very important genre. It reflected the people's conception of the past and of the surrounding world. The number of epics and legends of XIV century

was dedicated to comprehension of the Mongolian Invasion: the story of the battle at Kalka, of the devastation of Ryazan, of Baty's invasion, the saga about Eupatii Kolovrat, and also about the youth-defender of Smolensk Merkurii, who saved the city from Baty's army by the will of the Blessed Virgin.

In conditions of reconstruction of the state unity in Northeast Russia over XIV – the beginning of XV century favorable prerequisites for cultural rise appeared, enriched by the growth of national self-consciousness. The battle of Koulikovo had aroused patriotic feelings in Russian people. The number of outstanding literature masterpieces was dedicated to the splendid victory of Russian warriors on Koulikovo field, such as the annalistic tale 'About the great battle on the Don', 'The word about the existence and the pass away of the great prince Dmitry Ivanovich', military tale 'Zadonshina' (over Don), presumably compiled by Sofony Ryazanets ad exemplum 'The word about Igor's regiment'. Another work of the anti-horde series was the historic tale about Shelkan Dudentievich, relating to the revolt in Tver in 1237, about devastation of Moscow in 1382 by Tochtamysh, the invasions of Tamerlan and khan Edigey. The idea of the national liberation and patriotism was also reflected in the masterpieces dedicated to the defence of northeast borders of the Russian land: 'The existence of Dovmont' and 'The existence of Alexander Nevsky'. The entire number of existence narrations was dedicated to the princes, lost in the Horde. Such as 'The existence of Mikhail of Chernigov' and 'The existence of Mikhail of Tver', where the princes appear as the defenders of Orthodoxy and their Fatherland. Since the second half of XIII century chronicle making was gradually being renewed. Galich – Volyn principality, Novgorod, Rostov the Great, Ryazan, later (from 1250) Vladimir and since the end of the second half of the XIVth century Tver were remaining its main centers. Since the second half of XIV century the art of compiling chronicles and manuscripts experienced the significant rise. Moscow tradition of chronicle making became basic. Simonov, Andronikov and other monasteries were its centers. It has come to the present times as a part of Trinity chronicles and unlike other local chronicles presents the first code of all-Russian character since the times of Old Russia. Writing was developing along with literature. The characteristics of the level of literacy – official deeds – were found during archeological dig in the XX century in Novgorod. Gradually, together with the development of book

learning the character of writing was changing, business documentation was spreading. Standard writing 'ustav' was replaced by quicker and more fluent form of writing 'poluustav'. And in the end of XIV century the development of cursive writing was started. Paper was little by little ousting the more expensive parchment.

Section 2. SOCIOLOGY

GENDER STUDIES

Gender studies is a theoretical work in the social sciences or humanities that focuses on issues of sex and gender in language and society, and often addresses related issues including racial and ethnic oppression, postcolonial societies, and globalization. Work in gender studies influences and is influenced by the related fields of Ethnic Studies, African American Studies, Asian American Studies, Latino/a Studies, and Native American Studies

Work in gender studies is often associated with work in feminist theory, queer studies, and other theoretical aspects of cultural studies. While work in gender studies is principally found in humanities departments and publications (in areas such as English literature and other literary studies), it is also found in social-scientific areas such as anthropology, sociology, and psychology.

GENDER IN PSYCHOLOGY

The aggregate body of literature in the field of psychology says little about gender in certain and absolute terms. An enormous number of pages exist exploring the practical differences between men and women at present, but few if any provide uncontradicted information on the exact cause of those differences. There is an ongoing debate concerning Nature versus nurture that shows no sign of being resolved in the near future; while the issue of whether certain characteristics are determined by genetic factors or by exposure to environmental factors is important in general, it is particularly important in light of modern feminist concerns. In general, personality and behavioral differences are believed to be due to learning and conditioning or modeling and imitation rather than purely biologically-based tendencies, although a small yet noticea-

ble portion of research indicates some differences in brain size and structure that may be relevant to functionality. It is widely believed that the environment that a person experiences has a much greater impact upon the development and personality of that person than genetic factors (except in the case of some disorders which have well-documented genetic risk factors such as bipolar disorder, some types of mental retardation like Down's Syndrome, and schizophrenia).

Rosi Braidotti (1994), interviewed by Judith Butler, criticized gender studies as, "the take-over of the feminist agenda by studies on masculinity, which results in transferring funding from feminist faculty positions to other kinds of positions. There have been cases...of positions advertised as 'gender studies' being given away to the 'bright boys'. Some of the competitive take-over has to do with gay studies. Of special significance in this discussion is the role of the mainstream publisher Routledge who, in our opinion, is responsible for promoting gender as a way of deradicalizing the feminist agenda, re-marketing masculinity and gay male identity instead." Calvin Thomas (2000) counters that, "as Joseph Allen Boone points out, 'many of the men in the academy who are feminism's most supportive 'allies' *are* gay,'" and that it is "disingenuous" to ignore that mainstream publishers such as Routledge, and their marketing strategies, have helped feminist theorists.

HISTORY OF SOCIOLOGY

Sociology is a relatively new academic discipline among other social sciences including economics, political science, anthropology, history, and psychology. The ideas behind it, however, have a long history and can trace their origins to a mixture of common human knowledge and philosophy.

Sociology as a scientific discipline emerged in the early 19th century as an academic response to the challenge of modernity: as the world was becoming smaller and more integrated, people's experience of the world was increasingly atomized and dispersed. Sociologists hoped not only to understand what held social groups together, but also to develop an antidote to social disintegration.

The term "sociology" was coined by Auguste Comte in 1838 from Latin *socius* (companion, associate) and Greek *logia* (study of, speech). Comte hoped to unify all studies of humankind-including history, psy-

chology and economics. His own sociological scheme was typical of the 19th century; he believed all human life had passed through the same distinct historical stages and that, if one could grasp this progress, one could prescribe the remedies for social ills. Sociology was to be the 'queen of sciences'.

The first book with the term 'sociology' in its title was written in the mid-19th century by the English philosopher Herbert Spencer. In the United States, the discipline was taught by its name for the first time at the University of Kansas, Lawrence in 1890 under the course title *Elements of Sociology* (the oldest continuing sociology course in America and the *Department of History and Sociology* was established in 1891), and the first full fledged independent university department of sociology in the United States was established in 1892 at the University of Chicago by Albion W. Small, who in 1895 founded the *American Journal of Sociology*. The first European department of sociology was founded in 1895 at the University of Bordeaux by Émile Durkheim, founder of *L'Année Sociologique* (1896). The first sociology department to be established in the United Kingdom was at the London School of Economics and Political Science (home of the *British Journal of Sociology*) in 1904. In 1919 a sociology department was established in Germany at the Ludwig Maximilians University of Munich by Max Weber and in 1920 in Poland by Florian Znaniecki.

International cooperation in sociology began in 1893 when René Worms founded the small *Institut International de Sociologie* that was eclipsed by the much larger *International Sociologist Association* starting in 1949 (ISA). In 1905 the *American Sociological Association*, the world's largest association of professional sociologists, was founded.

Other "classical" theorists of sociology from the late 19th and early 20th centuries include Karl Marx, Ferdinand Toennies, Émile Durkheim, Vilfredo Pareto, and Max Weber. Like Comte, these figures did not consider themselves only "sociologists". Their works addressed religion, education, economics, psychology, ethics, philosophy, and theology, and their theories have been applied in a variety of academic disciplines. Their most enduring influence, however, has been on sociology, (with the exception of Marx, who is a central figure in the field of economics as well) and it is in this field that their theories are still considered most applicable.

Early theorists' approach to sociology, led by Comte, was to treat it in the same manner as natural science, applying the same methods and methodology used in the natural sciences to study social phenomena. The emphasis on empiricism and the scientific method sought to provide an incontestable foundation for any sociological claims or findings, and to distinguish sociology from less empirical fields like philosophy. This methodological approach, called positivism, became a source of contention between sociologists and other scientists, and eventually a point of divergence within the field itself.

As early as the 19th century positivist and naturalist approaches to studying social life were questioned by scientists like Wilhelm Dilthey and Heinrich Rickert, who argued that the natural world differs from the social world, as human society has unique aspects like meanings, symbols, rules, norms, and values. These elements of society result in human cultures. This view was further developed by Max Weber, who introduced antipositivism (humanistic sociology). According to this view, which is closely related to antinaturalism, sociological research must concentrate on humans and their cultural values. This has led to some controversy on how one can draw the line between subjective and objective research and also influenced hermeneutical studies. Similar disputes, especially in the era of Internet, have also led to the creation of unprofessional branches of sociology, such as public sociology.

THE SCIENCE AND MATHEMATICS OF SOCIOLOGY

Sociologists study society and social behaviour by examining the groups and social institutions people form, as well as various social, religious, political, and business organizations. They also study the behaviour of, and social interaction among, groups, trace their origin and growth, and analyze the influence of group activities on individual members. Sociologists are concerned with the characteristics of social groups, organizations, and institutions; the ways individuals are affected by each other and by the groups to which they belong; and the effect of social traits such as sex, age, or race on a person's daily life. The results of sociological research aid educators, lawmakers, administrators, and others interested in resolving social problems and formulating public policy. Most sociologists work in one or more specialties, such as social organization, social stratification, and social mobility; racial and ethnic

relations; education; family; social psychology; urban, rural, political, and comparative sociology; sex roles and relationships; demography; gerontology; criminology; and sociological practice.

Although sociology emerged in large part from Comte's conviction that sociology eventually would subsume all other areas of scientific inquiry, in the end, sociology did not replace the other sciences. Instead, sociology came to be identified with the other social sciences (i.e., psychology, economics, etc.). Today, sociology studies humankind's organizations, social institutions and their social interactions, largely employing a comparative method. The discipline has concentrated particularly on the organization of complex industrial societies. Recent sociologists, taking cues from anthropologists, have noted the "Western emphasis" of the field. In response, many sociology departments around the world are encouraging multi-cultural and multi-national studies.

Today, sociologists research micro-structures that organize society, such as race or ethnicity, social class, gender roles, and institutions such as the family; social processes that represent deviation from, or the breakdown of, these structures, including crime and divorce; and micro-processes such as interpersonal interactions and the socialization of individuals.

Sociologists often rely on quantitative methods of social research to describe large patterns in social relationships and in order to develop models that can help predict social change. Other branches of sociology believe that qualitative methods – such as focused interviews, group discussions and ethnographic methods – allow for a better understanding of social processes. Some sociologists argue for a middle ground that sees quantitative and qualitative approaches as complementary. Results from one approach can fill gaps in the other approach. For example, quantitative methods could describe large or general patterns while qualitative approaches could help to understand how individuals understand those patterns.

SOCIAL THEORY

Social theory refers to the use of abstract and often complex theoretical frameworks to explain and analyze social patterns and macro social structures in social life, rather than explaining patterns of social life.

Social theory always had an uneasy relationship to the more classic academic disciplines; many of its key thinkers never held a university position. While nowadays social theory is considered a branch of sociology, it is inherently interdisciplinary, as it deals with multiple scientific areas such as anthropology, economics, theology, history, and many others. First social theories developed almost simultaneously with the birth of the sociology science itself. Auguste Comte, known as 'father of sociology', also laid the groundwork for one of the first social theories - social evolutionism. In the 19th century three great, classical theories of social and historical change were created: the social evolutionism theory (of which social darwinism is a part of), the social cycle theory and the Marxist historical materialism theory. Although the majority of 19th century social theories are now considered obsolete they have spawned new, modern social theories. Modern social theories represent some advanced version of the classical theories, like Multilineal theories of evolution (neoevolutionism, sociobiology, theory of modernisation, theory of post-industrial society) or the general historical sociology and the theory of subjectivity and creation of the society.

Unlike disciplines within the "objective" natural sciences – such as physics or chemistry – social theorists are less likely to use the scientific method and other fact-based methods to prove a point. Instead, they tackle very large-scale social trends and structures using hypotheses that cannot be easily proved, except by the history and time, which is often the basis of criticism from opponents of social theories. Extremely critical theorists, such as deconstructionists or postmodernists, may argue that any type of research or method is inherently flawed. Many times, however, social theory is defined as such because the social reality it describes is so overarching as to be unprovable. The social theories of modernity or anarchy might be two examples of this.

However, social theories are a major part of the science of sociology. Objective science-based research can often provide support for explanations given by social theorists. Statistical research grounded in the scientific method, for instance, that finds a severe income disparity between women and men performing the same occupation can complement the underlying premise of the complex social theories of feminism or patriarchy. In general, and particularly among adherents to pure sociology, social theory has an appeal because it takes the focus away from

the individual (which is how most humans look at the world) and focuses it on the society itself and the social forces which control our lives. This sociological insight (or sociological imagination) has through the years appealed to students and others dissatisfied with the status quo because it carries the assumption that societal structures and patterns are either random, arbitrary or controlled by specific powerful groups – thus implying the possibility of change. This has a particular appeal to champions of the underdog, the dispossessed, and/or those at the bottom of the socioeconomic ladder because it implies that their position in society is undeserved and/or the result of oppression.

SOCIAL RESEARCH METHODS

There are several main methods that sociologists use to gather empirical evidence, which include questionnaires, interviews, participant observation, and statistical research.

The problem with all of these approaches is that they are all based on what theoretical position the researcher adopts to explain and understand the society the researcher sees in front of themselves. If one is a functionalist like Émile Durkheim, they are likely to interpret everything in terms of large-scale social structures. If a person is a symbolic interactionist, they are likely to concentrate on the way people understand one another. If the researcher is a Marxist, or a neo-Marxist, they are likely to interpret everything through the grid of class struggle and economics. Phenomenologists tend to think that there is only the way in which people construct their meanings of reality, and nothing else. One of the real problems is that sociologists argue that only one theoretical approach is the "right" one, and it is theirs. In practice, sociologists often tend to mix and match different approaches and methodologies, since each method produces particular types of data.

The Internet is of interest for sociologists in three ways: as a tool for research, for example, in using online questionnaires instead of paper ones, as a discussion platform, and as a research topic. Sociology of the Internet in the last sense includes analysis of online communities (e.g. as found in newsgroups), virtual communities and virtual worlds organizational change catalyzed through new media like the Internet, and societal change at-large in the transformation from industrial to informational society (or to information society).

SOCIOLOGY AND OTHER SOCIAL SCIENCES

In the early 20th century, sociologists and psychologists who conducted research in industrial societies contributed to the development of anthropology. It should be noted, however, that anthropologists also conducted research in industrial societies. Today sociology and anthropology are better contrasted according to different theoretical concerns and methods rather than objects of study.

Sociobiology is a relatively new field to branch from both the sociology and biology disciplines. Although the field once rapidly gained acceptance, it has remained highly controversial as it attempts to find ways in which social behavior and structures can be explained by evolutionary and biological processes. Sociobiologists are often criticized by sociologists for depending too greatly on the effects of genes in defining behavior. Sociobiologists often respond, however, by citing a complex relationship between nature and nurture. In this regard, sociobiology is closely related to anthropology, zoology, and evolutionary psychology. Nonetheless, for most in the discipline, its ideas are unacceptable. Some sociobiologists, such as Richard Machalek, call for the field of sociology to encompass the study of non-human societies along with human beings.

Sociology has some links with social psychology, but the former is more interested in social structures and the latter in social behaviors. A distinction should be made between these and forensic studies within these disciplines, particularly where anatomy is involved. These latter studies might be better named as Forensic psychology. As shown by the work of Marx and others, economics has influenced sociological theories.

GENDER

In a variety of different contexts, gender refers to the masculinity or femininity of words, persons, organisms, or characteristics. The classification into *masculine* and *feminine* is analogous to the biological sex of the referent, often by physical or syntactical analogy, linguistic decay, misunderstandings, societal norms, or personal choice. The nature of this categorisation varies depending on the context. For example,

gender can be used to refer to the differences in biological sex between two members of a species, or different characteristics of electrical connectors. On the other side, in feminist theory, gender is used to refer solely to socially constructed differences between male and female behaviour, and the gender of a noun in many languages may have nothing to do with the concept described by it.

Gender comes from Middle English *gendre*, ultimately from Latin *genus*, all meaning "kind", "sort", or "type". It appears in Modern French in the word *genre* (type, kind) and is related to the Greek root *gen-* (to produce), appearing in *genesis* and *oxygen*. As a verb, it is used for *to breed* in the King James Bible:

According to Aristotle, the Greek philosopher Protagoras used the terms *masculine*, *feminine*, and *neuter* to classify nouns, introducing the concept of grammatical gender.

Since the 14th century, the word is also used as a synonym for (biological) sex. Examples:

By 1900, this usage was considered jocular by some. In 1926, Fowler's *Modern English Usage* suggested that "gender...is a grammatical term only. To talk of persons...of the masculine or feminine g[ender], meaning of the male or female sex, is either a jocularly (permissible or not according to context) or a blunder."

Despite such pronouncements, which may be found in similar forms in many usage books, the use of gender to refer to sex has been increasingly common in the last several decades. This use of gender is comparably common, if not more common, than the equivalent use of sex. A few examples from this year: "The state has to justify any discrimination based on race, gender, national origin [etc.]" (*New Republic*); "No residential college at Yale prohibits visits by either gender" (*New York Times Magazine*); "Can clever readers really tell a writer's gender from his or her prose?" (*Harper's*). The growth of this usage, sometimes blamed on "feminists," is probably a result of the increased frequency of the word sex in the sense of sexual intercourse; gender is employed to avoid the potential physical connotations of sex.

In some parts of the social sciences, following a usage shift that began in the 1950s and was largely completed in the 1980s, *gender* has been used increasingly to refer to socially constructed aspects, in con-

trast to biologically determined, using the word *sex* for the latter. Example (again from MWofD) "Today a return to separate single-sex schools may hasten the revival of separate gender roles." Another example: "The effectiveness of the medication appears to depend on the sex (not gender) of the patient", but "In peasant societies, gender (not sex) roles are likely to be more clearly defined." This distinction has been advocated vociferously by some, who consider the use of *gender* as a euphemism for *sex* incorrect.

In the last half of the 20th century, the use of *gender* in academia has increased strongly, now outnumbering the occurrences of the word *sex* in the humanities, social sciences, and arts. However, use of the term *gender* includes the meaning *biological sex*, and the distinction between *sex* and *gender* is only fitfully observed.

SOCIAL CATEGORY

Since 1950, and increasing part of the academic literature, and of the public discourse uses *gender* for the perceived or projected (self-identified) masculinity or femininity of a person. The terms was introduced by Money (1955):

"The term *gender role* is used to signify all those things that a person says or does to disclose himself or herself as having the status of boy or man, girl or woman, respectively. It includes, but is not restricted to, sexuality in the sense of eroticism."

A person's gender is complex, encompassing countless characteristics of appearance, speech, movement and other factors not solely limited to biological sex.

Societies tend to have binary gender systems in which everyone is categorized as male or female, but this is not universal. Some societies include a third gender role; for instance, the Native American Two-Spirit people and the hijras of India.

There is debate over to what extent gender is a social construct and to what extent it is a biological construct. At the extremes of these views you have constructionism which suggests that it is entirely a social construct and essentialism which suggests that it's entirely a biological construct.

Gender associations are constantly changing as society progresses. For example, the color pink was considered masculine in the early 1900s and is now seen as feminine.

GENDER ROLE

It has been suggested that *Masculinity* be merged into this article or section. In many parts of the West, wearing a skirt may be unacceptable as part of a male gender role, but in Scotland men have traditionally worn a kilt, which is somewhat similar to a skirt.

In the social sciences and humanities, a **gender role** is a set of behavioral norms associated with males and with females, respectively, in a given social group or system. Gender is one component of the gender/sex system, which refers to "the set of arrangements by which a society transforms biological sexuality into products of human activity, and in which these transformed needs are satisfied" (Reiter 1975: 159). Every known society has a gender/sex system, although the components and workings of this system vary widely from society to society.

In many ways gender identity and roles function as any other social identity and role. Every known human society presents individuals with a set of statuses by which members of the society identify themselves and one another. Such statuses may be assigned to an individual automatically, based on the status of his or her parents, or based on some physical characteristic (including ones that emerge through the aging process); such statuses are called "ascribed." According to one viewpoint of gender, other statuses may also be "achieved" based on the activities and accomplishments of an individual. In either case, gender, like any other role, involves socially proscribed and prescribed behaviors, which may take the form of rules or values. Such rules and values do not determine or control an individual's behaviors absolutely. Usually they define boundaries of acceptable behavior within which there is always variation and room for individuality. Most researchers recognize that the concrete behavior of individuals is a consequence of both socially enforced rules and values, and individual disposition, whether genetic, unconscious, or conscious. Some researchers emphasize the objective social system, and others emphasize subjective orientations and dispositions.

Moreover, such creativity may, over time, cause the rules and values to change. Although all social scientists recognize that cultures and societies are dynamic and change, there have been extensive debates as to how, and how fast, they may change. Such debates are especially intense when they involve the gender/sex system, as people have widely differing views about how much gender depends on biological sex.

TALCOTT PARSONS' VIEWS OF GENDER ROLES

Working in the United States, Talcott Parsons developed a model of the nuclear family in 1955. (At that place and time, the nuclear family was considered to be the prevalent family structure.) It compared a strictly traditional view of gender roles to a more liberal view.

Parsons believed that the feminine role was an *expressive* one, whereas the masculine role, in his view, was *instrumental*. He believed that expressive activities of the woman fulfill 'internal' functions, for example to strengthen the ties between members of the family. The man, on the other hand, performed the 'external' functions of a family, such as providing monetary support.

The Parsons model was used to contrast and illustrate extreme positions on gender roles. Model A describes total separation of male and female roles, while Model B describes the complete dissolution of barriers between gender roles.

Both extreme positions are rarely found in reality. Actual behavior of individuals is somewhere between these poles. The most common 'model' followed in real life is the 'model of double burden' (see Gender roles and feminism below).

Jobs	Model A – Total role segregation	Model B – Total disintegration of roles
Education	gender-specific education, high professional qualification is important only for the man	co-educative schools, same content of classes for girls and boys, same qualification for men and women
Profession	the workplace is not the primary area of women, career and professional advancement is unimportant for women	for women, career is just as important as for men, therefore equal professional opportunities for men and women are necessary
Housework	housekeeping and child care are the primary functions of	all housework is done by both parties to the marriage in equal shares

	the woman, participation of the man in these functions is only partially wanted	
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End

Jobs	Model A – Total role segregation	Model B – Total disintegration of roles
Decision making	in case of conflict man has the last say, for example in choosing the place to live, choice of school for children, buying decisions	man cannot dominate over woman, solutions do not always follow the principle of finding a concerted decision, this may lead to separate vacations, or living in different apartments
Child care and education	woman takes care of the largest part of these functions, she educates children and cares for them in every way	man and woman share these functions equally

According to the interactionist approach, roles (including gender roles) are not fixed, but are constantly negotiated between individuals.

Gender role can influence all kinds of behavior, such as choice of clothing, choice of work and personal relationships; e.g., parental status.

SOCIALIZATION

Changing norms of socialization: Louis XV in 1712, wearing the customary baby clothes of the time, would be considered "cross-dressed" in the 21st century.

The process by which the individual learns and accepts roles is called socialization. Socialization works by encouraging wanted and discouraging unwanted behavior. These sanctions by agencies of socialization such as the family, schools, and the media make it clear to the child what the behavioral norms it ought to follow are. The child typically follows the examples of its parents, siblings and teachers. Mostly, accepted behavior is not produced by outright coercion. The individual has choice as to if or to what extent he or she conforms. Typical encouragements of gender role behavior are no longer as powerful as they used to be a century ago.

Still, once someone has accepted a set of behavioral norms these are typically very important to the individual. Sanctions to unwanted behavior and role conflict can be stressful.

CRITICISM OF BIOLOGISM

Gender roles have long been a staple of the Nature/Nurture debate: traditional theories of gender usually assume that one's gender identity, and hence one's gender role, is a natural given. For example, it is often claimed in Western societies that women are naturally more fit to look after children. The idea that differences in gender roles originate in differences in biology has found support in parts of the scientific community. 19th-century anthropology sometimes used descriptions of the imagined life of paleolithic hunter-gatherer societies for evolutionary explanations for gender differences. For example, those accounts maintain that the need to take care of offspring may have limited the females' freedom to hunt and assume positions of power.

More recently, sociobiology and evolutionary psychology have explained those differences in social roles by treating them as adaptations. This approach, too, is controversial.

Due to the influence of (among others) Simone de Beauvoir's feminist works and Michel Foucault's reflections on sexuality, the idea that gender was unrelated to sex gained ground during the 1980s, especially in sociology and cultural anthropology. In some circles, it was believed that a person could therefore be born with male genitals but still be of feminine gender. In 1987, R.W. Connell did extensive research on whether there are any connections between biology and gender role and concluded that there were none. Most scientists reject Connell's research because concrete evidence exists proving the effect of hormones on behavior. The debate continues to rage on. Simon Baron-Cohen, a Cambridge Univ. professor of psychology and psychiatry, has said that "the female brain is predominantly hard-wired for empathy, while the male brain is predominantly hard-wired for understanding and building systems."

The current trend in Western societies toward men and women sharing similar occupations, responsibilities and jobs suggests that the sex one is born with does not directly determine one's abilities. While there are differences in average capabilities of various kinds (e.g., phys-

ical strength) between the sexes, the capabilities of some members of one sex will fall within the range of capabilities needed for tasks conventionally assigned to the other sex.

Women choose to be housewives more often than men chose to be househusbands. It has been suggested by scientists that biology plays a role in this, and it has been suggested by feminists that it is the result of gender roles. Many scientists and feminists believe that gender behavioral differences occur because of both factors. However, some have argued that gender roles themselves are abstractions of overall differences between men and women, introducing the idea of circularity and the idea of the social reinforcement of natural tendencies leading to a factitious separation between the activities of males and the activities of females.

CHANGING ROLES

Gender role is composed of several elements. A person's gender role can be expressed through clothing, behavior, choice of work, personal relationships and other factors.

Gender roles were traditionally divided into strictly feminine and masculine gender roles, though these roles have diversified today into many different acceptable male or female gender roles. However, gender role norms for women and men can vary significantly from one country or culture to another, even within a country or culture. People express their gender role somewhat uniquely.

Gender role can vary according to the social group to which a person belongs or the subculture with which he or she chooses to identify. Historically, for example, eunuchs had a different gender role because their biology was changed.

A woman publicly witnessing at a Quaker meeting seemed an extraordinary feature of the Religious Society of Friends, worth recording for a wider public. Engraving by Bernard Picart, *ca* 1723

Androgyny, a term denoting the display of both male and female behaviour, also exists. Many terms have been developed to portray sets of behaviors arising in this context. The masculine gender role has become more malleable since the 1950s. One example is the "sensitive new age guy", which could be described as a traditional male gender role with a more typically "female" empathy and associated emotional

responses. Another is the metrosexual, a male who adopts similarly "female" grooming habits. Some have argued that such new roles are merely rebelling against tradition more so than forming a distinct role.

According to sociological research, traditional feminine gender roles have become less relevant and hollower in Western societies since industrialization started. For example, the cliché that women do not follow a career is obsolete in many Western societies. On the other hand, in the media there are attempts to portray women who adopt an extremely classical role as a subculture.

One consequence of social unrest during the Vietnam War era was that men began to let their hair grow to a length that had previously been considered appropriate only for women. Somewhat earlier, women had begun to cut their hair to lengths previously considered appropriate only to men.

CULTURE AND GENDER ROLES

Ideas of appropriate behaviour according to gender vary among cultures and era, although some aspects receive more widespread attention than others. An interesting case is described by R.W. Connell in *Men, Masculinities and Feminism*:

"There are cultures where it has been normal, not exceptional, for men to have homosexual relations. There have been periods in 'Western' history when the modern convention that men suppress displays of emotion did not apply at all, when men were demonstrative about their feeling for their friends. Mateship in the Australian outback last century is a case in point."

Other aspects, however, may differ markedly with time and place. In pre-industrial Europe, for example, the practice of medicine (other than midwifery) was generally seen as a male prerogative. However, in Russia, health care was more often seen as a feminine role. The results of these views can still be seen in modern society, where European medicine is most often practiced by men, while the majority of Russian doctors are women.

In many other cases, the elements of convention or tradition seem to play a dominant role in deciding which occupations fit in with which gender roles. In the United States, physicians have traditionally been men, and the few people who defied that expectation received a special

job description: "woman doctor". Similarly, we have special terms like "male nurse", "woman lawyer", "lady barber", "male secretary," etc. But in China and the former Soviet Union countries, medical doctors are predominantly women, and in the United Kingdom and Taiwan it is very common for all of the barbers in a barber shop to be women.

For example, in the Western society, people whose gender appears masculine and whose inferred and/or verified external genitalia are male are often criticised and ridiculed for exhibiting what the society regards as a woman's gender role. For instance, someone with a masculine voice, a five o'clock shadow (or a fuller beard), an Adam's apple, etc., wearing a woman's dress and high heels, carrying a purse, etc., would most likely draw ridicule or other unfriendly attention in ordinary social contexts (the stage and screen excepted). It is seen by some in that society that such a gender role for a man is not acceptable. This, and other societies, impose expectations on the behavior of the members of society, and specifically on the gender roles of individuals, resulting in prescriptions regarding gender roles.

It should be noted that some societies are comparatively rigid in their expectations, and other societies are comparatively permissive. Some of the gender signals that form part of a gender role and indicate one's gender identity to others are quite obvious, and others are so subtle that they are transmitted and received out of ordinary conscious awareness.

GENDER ROLES AND FEMINISM

Most feminists argue that traditional gender roles are oppressive for women. They assume that the female gender role was constructed as an opposite to an ideal male role, and helps to perpetuate patriarchy.

For approximately the last 100 years women have been fighting for equality (especially in the 1960s with second-wave feminism and radical feminism, which are the most notable feminist movements) and were able to make changes to the traditionally accepted feminine gender role. However, most feminists today say there is still work to be done.

Numerous studies and statistics show that even though the situation for women has improved during the last century, discrimination is still widespread: women earn a smaller percentage of aggregate income than men, occupy lower-ranking job positions than men and do most of

the housekeeping work. Some women, such as the editors of the Independent Women's Forum, dispute this claim. They argue that women actually earn 98 cents on the dollar when factors such as age, education, and experience are taken into account. However, feminists believe these factors are not independent of gender. In fact, gender socialization informs the kind and length of education women receive, as well as the age in which women enter the workplace and the time spent working. Opponents counter that, regardless of what forces influence these factors, the evidence of wide-spread discrimination against working women is quite weak.

Furthermore, there has been a perception of Western culture, in recent times, that the female gender role is dichotomized into either being a "stay at home mother" or a "career woman". In reality, women usually face a double burden: the need to balance job and child care deprives women of spare time. Whereas the majority of men with university educations have a career as well as a family, only 50 percent of academic women have children. The double burden problem was introduced to scientific theory in 1956 by Myrdal and Klein in their work "Women's two roles: home and work," published in London.

When feminism became a conspicuous protest movement in the sixties critics oftentimes argued that women who wanted to follow a traditional role would be discriminated against in the future and forced to join the workforce. This has not proven true. At the beginning of the 21st century women who choose to live in the classical role of the "stay at home mother" are acceptable to Western society. There is not complete tolerance of all female gender roles — there is some lasting prejudice and discrimination against those who choose to adhere to traditional female gender roles (sometimes termed being a "girly girl"), despite feminism, in theory, not being about the choices made but the freedom to make that choice.

SOCIOLOGY

Sociology is a scientific study of human social behavior. As the study of humans in their collective aspect, sociology is concerned with all group activities—economic, social, political, and religious. Sociologists study such areas as bureaucracy, community, deviant behavior, family, public opinion, social change, social mobility, social stratifica-

tion, and such specific problems as crime, divorce, child abuse, and substance addiction. Sociology tries to determine the laws governing human behavior in social contexts; it is sometimes distinguished as a general social science from the special social sciences, such as economics and political science, which confine themselves to a selected group of social facts or relations.

THE EVOLUTION OF SOCIOLOGY

A number of Western political theorists and philosophers, including Plato, Polybius, Machiavelli, Vico, Hobbes, Locke, Montesquieu, and Rousseau, have treated political problems in a broader social context. Thus Montesquieu regarded the political forms of different states as a consequence of the working of deep underlying climatic, geographic, economic, and psychological factors. In the 18th cent., Scottish thinkers made inquiries into the nature of society; scholars like Adam Smith explored the economic causes of social organization and social change, while Adam Ferguson considered the noneconomic causes of social cohesion.

It was not until the 19th cent., however, when the concept of society was finally separated from that of the state, that sociology developed into an independent study. The term *sociology* was coined (1838) by Auguste Comte. He attempted to analyze all aspects of cultural, political, and economic life and to identify the unifying principles of society at each stage of human social development. Herbert Spencer applied the principles of Darwinian evolution to the development of human society in his popular and controversial *Principles of Sociology* (1876—96). An important stimulus to sociological thought came from the work of Karl Marx, who emphasized the economic basis of the organization of society and its division into classes and saw in the class struggle the main agent of social progress.

The founders of the modern study of sociology were Émile Durkheim and Max Weber. Durkheim pioneered in the use of empirical evidence and statistical material in the study of society. Weber's major contribution was as a theorist, and his generalizations about social organization and the relation of belief systems, including religion, to social action are still influential. He developed the use of the ideal type—a working model, based on the selective combination of certain elements of

historical fact or current reality—as a tool of sociological analysis. In the United States the study of sociology was pioneered and developed by Lester Frank Ward and William Graham Sumner.

The most important theoretical sociology in the 20th cent. has moved in three directions: conflict theory, structural-functional theory, and symbolic interaction theory. Conflict theory draws heavily on the work of Karl Marx and emphasizes the role of conflict in explaining social change; prominent conflict theorists include Ralf Dahrendorf and C. Wright Mills. Structural-functional theory, developed by Talcott Parsons and advanced by Robert Merton, assumes that large social systems are characterized by homeostasis, or "steady states." The theory is now often called "conservative" in its orientation. Symbolic interaction, begun by George Herbert Mead and further developed by Herbert Blumer and others, focuses on subjective perceptions or other symbolic processes of communication.

Section 3. LAW

HISTORY OF THE COMMON LAW

The common law originally developed under the auspices of the adversarial system in historical England from judicial decisions that were based in tradition, custom, and precedent. Such forms of legal institutions and culture bear resemblance to those which existed historically in continental Europe and other societies where precedent and custom have at times played a substantial role in the legal process, including Germanic law recorded in Roman historical chronicles. The form of reasoning used in common law is known as casuistry or case-based reasoning. The common law, as applied in civil cases (as distinct from criminal cases), was devised as a means of compensating someone for wrongful acts known as torts, including both intentional torts and torts caused by negligence and as developing the body of law recognizing and regulating contracts. Today common law is generally thought of as applying only to civil disputes; originally it encompassed the criminal law before criminal codes were adopted in most common law jurisdictions in the late 19th century, although many criminal codes reflect legislative attempts to codify the common law. The type of procedure prac-

ticed in common law courts is known as the adversarial system; this is also a development of the common law.

Before the institutional stability imposed on England by William the Conqueror in 1066, English residents, like those of many other societies, particularly the Germanic cultures of continental Europe, were governed by unwritten local customs that varied from community to community and were enforced in often arbitrary fashion. For example, courts generally consisted of informal public assemblies that weighed conflicting claims in a case and, if unable to reach a decision, might require an accused to test guilt or innocence by carrying a red-hot iron or snatching a stone from a cauldron of boiling water or some other "test" of veracity (trial by ordeal). If the defendant's wound healed within a prescribed period, he was set free as innocent; if not, execution usually followed.

In 1154, Henry II became the first Plantagenet king. Among many achievements, Henry institutionalized common law by creating a unified system of law "common" to the country through incorporating and elevating local custom to the national, ending local control and peculiarities, eliminating arbitrary remedies, and reinstating a jury system of citizens sworn on oath to investigate reliable criminal accusations and civil claims. The jury reached its verdict through evaluating common local knowledge, not necessarily through the presentation of evidence, a distinguishing factor from today's civil and criminal court systems.

Henry II's creation of a powerful and unified court system, which curbed somewhat the power of canonical (church) courts, brought him (and England) into conflict with the church, most famously, with Thomas Becket, the Archbishop of Canterbury. Things were resolved eventually, at least for a time, in Henry's favor when a group of his henchmen murdered Becket. For its part, the Church soon canonized Becket as a saint.

As early as the 15th century, it became the practice that litigants who felt they had been cheated by the common-law system would petition the King in person. For example, they might argue that an award of damages (at common law) was not sufficient redress for a trespasser occupying their land, and instead request that the trespasser be evicted. From this developed the system of equity, administered by the Lord Chancellor, in the courts of chancery. By their nature, equity and law

were frequently in conflict and litigation would frequently continue for years as one court countermanded the other, even though it was established by the 17th century that equity should prevail. A famous example is the fictional case of Jarndyce and Jarndyce in *Bleak House*, by Charles Dickens.

In England, courts of law and equity were combined by the Judicature Acts of 1873 and 1875, with equity being supreme in case of conflict. In the United States, parallel systems of law (providing money damages) and equity (fashioning a remedy to fit the situation) survived well into the 20th century in most jurisdictions. In the federal courts there is no separation between law and equity; Delaware still has separate courts of law and equity, and in many states there are separate divisions for law and equity within one court.

COMMON LAW LEGAL SYSTEMS

The common law constitutes the basis of the legal systems of: England and Wales, the Republic of Ireland, the states of the United States (except Louisiana), Canada (except Quebec civil law), Australia, New Zealand, South Africa, India, Malaysia, Brunei, Pakistan, Singapore, Hong Kong, and many other generally English-speaking countries or Commonwealth countries. Essentially, every country which has been colonised at some time by Britain uses common law except those that had been colonized by other nations, such as Quebec (which follows French law to some extent) and South Africa (which follows Roman Dutch law), where the prior civil law system was retained to respect the civil rights of the local colonists. India's system of common law is also a mixture of English law and the local Hindu law.

The main alternative to the common law system is the civil law system, which is used in Continental Europe, and most of the rest of the world. The former Soviet Bloc and other Socialist countries used a Socialist law system.

The opposition between civil law and common law legal systems has become increasingly blurred, with the growing importance of jurisprudence (almost like case law but in name) in civil law countries, and the growing importance of statute law and codes in common law countries (for instance, in matters of criminal and commercial law).

Scotland is often said to use the civil law system but in fact it has a unique system which combines elements of an uncodified civil law dating back to the *Corpus Juris Civilis* with an element of common law long predating the Treaty of Union with England in 1707. Scots common law differs in that the use of *precedents* is subject to the courts seeking to discover the principle which justifies a law rather than to search for an example as a *precedent* and that the principles of natural justice and fairness have always formed a source of Scots Law. Comparable pluralistic legal systems operate in Quebec, Louisiana and South Africa. These systems are referred to as mixed legal systems.

The U.S. state of California has a system based on common law, but it has codified the law in the manner of the civil law jurisdictions. The reason for the enactment of the codes in California in the nineteenth century was to replace a pre-existing system based on Spanish civil law with a system based on common law, similar to that in most other states. California and a number of other Western states, however, have retained the concept of community property derived from civil law. The California courts have treated portions of the codes as an extension of the common-law tradition, subject to judicial development in the same manner as judge-made common law. (Most notably, in the case *Li v. Yellow Cab Co.*, 13 Cal.3d 804 (1975), the California Supreme Court adopted the principle of comparative negligence in the face of a California Civil Code provision codifying the traditional common-law doctrine of contributory negligence.)

The state of New York, which also has a civil law history from its Dutch colonial days, also began a codification of its laws in the 19th century. The only part of this codification process that was considered complete is known as the Field Code applying to civil procedure. The original colony of New Netherlands was settled by the Dutch and the law was also Dutch. When the British captured pre-existing colonies they continued to allow the local settlers to keep their civil law. However, the Dutch settlers revolted against the English and the colony was recaptured by the Dutch. When the English finally regained control of New Netherlands – as a punishment unique in the history of the British Empire – they forced the English common law upon all the colonists, including the Dutch. This was problematic as the patroon system of land holding, based on the feudal system and civil law, continued to operate

in the colony until it was abolished in the mid-nineteenth century. The influence of Roman Dutch law continued in the colony well into the late nineteenth century. The codification of a law of general obligations shows how remnants of the civil law tradition in New York continued on from the Dutch days.

BASIC PRINCIPLES OF COMMON LAW

Statutes which reflect English common law are understood always to be interpreted in light of the common law tradition, and so may leave a number of things unsaid because they are already understood from the point of view of pre-existing case law and custom. This can readily be seen in the area of criminal law, which while remaining largely governed by the common law in England, has been entirely codified in many US states. Codification is the process where a statute is passed with the intention of restating the common law position in a single document rather than creating new offences, so the common law remains relevant to their interpretation. This is why even today American law schools teach the common law of crime as practiced in England in 1750, since the colonies (and subsequently the states) deviated from the common law as practiced in England only after that date.

By contrast to the statutory codifications of common law, some laws are purely statutory, and may create a new cause of action beyond the common law. An example is the tort of wrongful death, which allows certain persons, usually a spouse, child or estate, to sue for damages on behalf of the deceased. There is no such tort in English common law; thus, any jurisdiction that lacks a wrongful death statute will not allow a lawsuit for the wrongful death of a loved one. Where a wrongful death statute exists, the damages or compensation available are limited to those outlined in the statute (typically, an upper limit on the amount of damages). Courts generally interpret statutes that create new causes of action narrowly – that is, limited to their precise terms – because the courts generally recognize the legislature as being supreme in deciding the reach of judge made law unless such statute should violate some "second order" constitutional law provision (compare judicial activism).

Where a tort is rooted in common law, then all damages traditionally recognized historically for that tort may be sued for, whether or not there is mention of those damages in the current statutory law. For in-

stance, a person who sustains bodily injury through the negligence of another may sue for medical costs, pain, suffering, loss of earnings or earning capacity, mental and/or emotional distress, loss of quality of life, disfigurement, and more. These damages need not be set forth in statute as they already exist in the tradition of common law. However, without a wrongful death statute, most of them are extinguished upon death.

LAW

Law is the formal regime that orders human activities and relations through systematic application of the force of a governing body and the society it rules over.

Laws may require or proscribe, or even restrict given actions, as well as empower citizens to engage in certain activities, such as entering into contracts and drafting wills. Laws may also simply mandate what procedures are to be followed in a given context; for example, the U.S. Constitution mandates how Congress, along with the President, may create laws. A more specific example might be the Securities Exchange Act of 1934, which, along with the Securities and Exchange Commission (SEC), a regulatory body, mandates how public companies must go about making periodic disclosures to investors.

In most countries only professionals trained in the law can effectively understand and explain legal principles, draft relevant documents, and guide parties through legal disputes, whether with another private party (civil law) or with the government (often involving criminal law).

According to St. Thomas Aquinas, the law is an ordinance of reason for the common good, promulgated by him who has the care of the community.

Most laws and legal systems—at least in the Western world—are quite similar in their essential themes, arising from similar values and similar social, economic, and political conditions, and they typically differ less in their substantive content than in their jargon and procedures. Communication between legal systems is the focus of legal translation and legal lexicography, which deals with the principles of producing a law dictionary.

One of the fundamental similarities across different legal systems is that, to be of general approval and observation, a law has to appear to

be public, effective, and legitimate, in the sense that it has to be available to the knowledge of the citizen in common places or means, it needs to contain instruments to grant its application, and it has to be issued under given formal procedures from a recognized authority.

In the context of most legal systems, laws are enacted through the processes of constitutional charter, constitutional amendment, legislation, executive order, rulemaking, and adjudication. Within common law jurisdictions, rulings by judges are an important additional source of legal rules; within civil law jurisdictions, rulings do not constitute *de jure* for the future, but in practice, jurisprudence is often quite equivalent to common law precedent.

However, *de facto* laws also come into existence through custom and also tradition. (See generally Consuetudinary law; Anarchist law.)

Law has an anthropological dimension. In order to have a culture of law, people must dwell in a society where a government exists whose authority is hard to evade and generally recognised as legitimate. People take their grievances before the government and its agents, who arbitrate disputes and enforce penalties.

This behaviour is contrasted with the culture of honor, where respect for persons and groups stems from fear of the disproportionate revenge they may exact if their person, property, or prerogatives are not respected. Cultures of law must be maintained. They can be eroded by declining respect for the law, achieved either by weak government unable to wield its authority, or by burdensome restrictions that attempt to forbid behaviour prevalent in the culture or in some subculture of the society. When a culture of law declines, there is a possibility that an undesirable culture of honor will arise in its place.

A particular society or community adopts a specific set of laws to regulate the behavior of its own members, to order life in its political territory, to grant or acknowledge the rights and privileges of its citizens and other people who may come under the jurisdiction of its courts, and to resolve disputes.

There are several distinct laws and legal traditions, and each jurisdiction has its own set of laws and its own legal system. Individually codified laws are known as statutes, and the collective body of laws relating to one subject or emanating from one source are usually identified by specific reference. (E.g., Roman law, Common law, and Criminal

law.) Moreover, the several different levels of government each produce their own laws, though the extent to which law is centralized varies. Thus, at any one place there can be conflicting laws in force at the local, regional, state, national, or international levels. (See conflict of laws, Preemption of State and Local Laws.)

AREAS OF LAW

The are different types of law:

Administrative law refers to the body of law which regulates bureaucratic managerial procedures and is administered by the executive branch of a government; rather than the judicial or legislative branches (if they are different in that particular jurisdiction). This body of law regulates international trade, manufacturing, pollution, taxation, and the like. This is sometimes seen as a subcategory of Civil law and sometimes called public law as it deals with regulation and public institutions.

Canon law comprises the laws of the Anglican, Eastern Orthodox, Roman Catholic churches.

Case law (precedental law) regulates, via precedents, how laws are to be understood. Case law, also called common law or judge-made law, is derived from the body of rulings made by a country's courts. In the United States, the primary source of case law relating to federal and constitutional questions is the Supreme Court of the United States. The states, each with its own final State Supreme Court, generate case law that is only binding precedent in that state, and which may be influential in other states. In countries that were once part of the British Empire the Judicial Committee of the Privy Council and the House of Lords are primary sources of case law, though not necessarily binding precedent, as each country has its own court of last resort.

Civil law, not to be confused with the civil legal system, has several meanings:

Secular law is the legal system of a non-theocratic government, such as that which developed in England, especially during the reign of Henry II.

Private law regulates relationships between persons and organizations including contracts and responsible behaviour such as through liability through negligence. This body of law enforces statutes or the

common law by allowing a party, whose rights have been violated, to collect damages from a defendant. Where monetary damages are deemed insufficient, civil court may offer other remedies in equity; such as forbidding someone to do an act (eg; an injunction) or formally changing someone's legal status (eg; divorce). This body of law includes the law of torts in common law systems, or in civilian systems, the Law of Obligations.

Commercial law, often considered to be part of civil law, covers business and commerce relations including sales and business entities.

Common law is derived from Anglo-Saxon customary law, also referred to as judge-made law, as it developed over the course of many centuries in the English courts. Judges' decisions are heavily influenced, and sometimes actually bound, by precedents set by the judges in previous decisions on related matters.

Criminal law (penal law) is the body of laws which regulate governmental sanctions (such as imprisonment and/or fines) as retaliation for crimes against the social order.

Family law is an area of the law that deals with family-related issues and domestic relations including, but not limited to marriage, civil unions, divorce, spousal abuse, child custody and visitation, property, alimony, and child support awards, as well as child abuse issues, and adoption.

Halakha (Jewish law) is the body of rabbinic law, custom and tradition which governs many Jewish communities.

International law governs the relations between states, or between citizens of different states, or international organizations. Its two primary sources are customary law and treaties.

Natural law is the law that is immanent in Nature.

Procedural law are rules and regulations found in a legal system that regulate access to legal institutions such as the courts, including the filing of private lawsuits and regulating the treatment of defendants and convicts by the public criminal justice system. Within this field are laws regulating arrests and evidence, injunctions and pleadings. Procedural law defines the procedure by which law is to be enforced. See criminal procedure and civil procedure.

Sharia (Islamic law) is a body of law which governs many Islamic communities.

Space law regulates events occurring outside Earth's atmosphere. This field is in its infancy.

PROPERTY LAW

Property law is the law that governs the various forms of ownership in real property (land as distinct from personal or movable possessions) and in personal property, within the common law legal system. In the civil law system, there is a division between movable and immovable property. Movable property roughly corresponds to personal property, while immovable property corresponds to real estate or real property, and the associated rights and obligations thereon.

The concept, idea or philosophy of property underlies all property law. In some jurisdictions, historically all property was owned by the monarch and it devolved through feudal land tenure or other feudal systems of loyalty and fealty.

The French Revolution introduced the idea of the absolute ownership of property. It is such ownership that was introduced into the civil law by the Code Napoleon. This is in contradistinction with the ideas of property in common law that remained tied to their feudal past.

PROPERTY RIGHTS AND CONTRACTUAL RIGHTS

Property rights are rights over things enforceable against other persons. By contrast, contractual rights, are rights enforceable against particular persons. Property rights, however, may arise from a contract, so there is an overlap between the two systems of rights. In relation to the sale of land, for example, two sets of legal relationships exist alongside one another: the personal right to sue for damages on the contract, and the proprietary right exercisable over the thing.

A separate distinction is evident where rights granted are insufficiently substantial to confer on the non-owner a definable interest right in the thing. The clearest example of these rights is the licence. In general, even if licences are created by a binding contract, they do not give rise to proprietary interests.

Property rights are also distinguished from personal rights. Practically all contemporary societies acknowledge this basic ontological and ethical distinction. In the past, groups lacking political power have often

been disqualified from the benefits of property. In an extreme form this has meant that persons have become "objects" of property right, legally "things", or chattels – see slavery. More commonly, marginalised groups have been denied legal rights to own property. These include Jews in England, married women in Western societies until the late 19th century.

The dividing line between personal rights and property rights is not always easy to draw. For instance, is one's reputation property which can be commercially exploited by affording property rights to it? The question of the proprietary character of personal rights is particularly relevant in the case of rights over human tissue, organs and other body parts.

There have been recent cases of women being subordinated to the fetus, through the imposition of unwanted caesarian sections. English judges have recently made the point that such women lack the right to exclusive control over their own bodies, formerly considered a fundamental common law right. In the United States, a "quasi-property" interest has been explicitly declared in the dead body. Also in the United States, it has been recognised that people have an alienable proprietary "right of publicity" over their "persona". The patenting of biotechnological processes and products based upon human genetic material may be characterised as creating property in human life.

CLASSIFICATION OF PROPERTY LAW

Property law is characterized by a great deal of historical continuity and technical terminology. The basic distinction in common law systems is between real property (land) and personal property (chattels).

Before the mid-19th century, the principles governing the devolution of real property and personal property on an intestacy were quite different. Though this dichotomy does not have the same significance anymore, the distinction is still fundamental because of the essential differences between the two categories. An obvious example is the fact that land is immovable, and thus the rules that govern its use must differ. A further reason for the distinction is that legislation is often drafted employing the traditional terminology.

The division of land and chattels has been criticized as being not satisfactory as a basis for categorizing the principles of property law

since it concentrates attention not on the proprietary interests themselves but on the objects of those interests. Moreover, in the case of fixtures, chattels which are affixed to or placed on land may become part of the land.

Real property is generally sub-classified into:

corporeal hereditaments – tangible real property (land)

incorporeal hereditaments – intangible real property such as an easement of way.

POSSESSION

The concept of possession developed from a legal system whose principal concern was to avoid civil disorder. The general principle is that a person in possession of land or goods, even as a wrongdoer, is entitled to take action against anyone interfering with the possession unless the person interfering is able to demonstrate a superior right to do so.

In the United Kingdom, the Torts (Interference with Goods) Act 1977 has significantly amended the law relating to wrongful interference with goods and abolished some longstanding remedies and doctrines.

The most usual way of acquiring an interest in property is as the result of a consensual transaction with the previous owner, for example, a sale of a gift. Dispositions by will may also be regarded as consensual transactions, since the effect of a will is to provide for the distribution of the deceased person's property to nominated beneficiaries. A person may also obtain an interest in property under a trust established for his or her benefit by the owner of the property.

It is also possible for property to pass from one person to another independently of the consent of the property owner. For example, this occurs when a person dies intestate, goes bankrupt, or has the property taken in execution of a court judgment.

Occasionally, as a result of fraud or mistake, several people claim interests in one object, the claims being inconsistent with each other. This may arise where the person purporting to create or transfer the interest has a valid title, but purports to create several interests wholly or partially inconsistent with each other. In this case it is necessary for the courts to resolve the priorities conflict by determining the ranking of

these interests. The need to resolve such conflicts suggests that different classes of proprietary interests have different spheres of enforceability depending on their place in the hierarchy.

LEASES

Over the centuries, leases have served many purposes and the nature of legal regulation has varied according to those purposes and the social and economic conditions of the times. Leaseholds, for example, were mainly used for agricultural purposes until the late 18th century and early 19th century when the growth of cities in industrialised countries had made the leasehold an important form of landholding in urban areas.

The modern law of landlord and tenant in common law jurisdictions retains the influence of the common law and, particularly, the *laissez-faire* philosophy that dominated the law of contract and the law of property in the 19th century. With the growth of consumerism, consumer protection legislation recognised that common law principles that assume equal bargaining power between the contracting parties are acknowledged to work hardship when that assumption is inaccurate. Consequently reformers have emphasised the need to assess residential tenancy laws in terms of protection they provide to tenants.

Section 4. ECONOMICS

ECONOMICS

Economics (from the Greek οἶκος [*oikos*], 'house', and νόμος [*nomos*], 'rule', hence "*household management*") is a social science that studies the production, distribution, trade and consumption of goods and services. Economics is said to be normative when it recommends one choice over another, or when a subjective value judgment is made. Conversely, economics is said to be positive when it tries objectively to predict and explain consequences of choices, given a set of assumptions and/or a set of observations. The choice of which assumptions to make in building a model as well as which observations to highlight is, however, normative.

Economics, which focuses on measurable variables, is broadly divided into two main branches: **microeconomics**, which deals with individual agents, such as households and businesses, and **macroeconomics**, which considers the economy as a whole, in which case it considers aggregate supply and demand for money, capital and commodities. Aspects receiving particular attention in economics are resource allocation, production, distribution, trade, and competition. Economic logic is increasingly applied to any problem that involves choice under scarcity or determining economic value.

The mainstream economic theory currently in vogue in the business schools of most industrial countries is neoclassical economics.

Broadly speaking, economics is a social science, and its area of study is human activity involved in meeting needs and wants. However, beyond this there are a range of definitions, past and present which have been applied, first to the term political economy and then to the modern term economics. John Maynard Keynes once remarked that "Economics is the science of thinking." Broadly the history of the study moved from the study of "wealth" to "welfare" to the idea studying trade offs. Modern neo-classical economics focuses on measurable variables, and their effect on price.

The earliest definitions of political economy were simple, elegant statements defining it as the study of wealth. Adam Smith, generally regarded as the father of economics, author of *An inquiry into Nature and Causes of Wealth of Nations* (generally known as *Wealth of Nations*) defines economics simply as "The science of wealth". Smith offered another definition, "The Science relating to the laws of production, distribution and exchange." Wealth was defined as the specialization of labor which allowed a nation to produce more with its supply of labor and resources. This definition divided Smith and Hume from previous definitions which defined wealth as gold. Hume argued that gold without increased activity simply serves to raise prices.

John Stuart Mill defined economics as "The practical science of production and distribution of wealth"; this definition was adopted by the *Concise Oxford Dictionary*. For Mill wealth is defined as the stock of useful things.

Definitions in terms of wealth emphasize production and consumption, and do not deal with the economic activities of those not sig-

nificantly involved in these two processes (for example, retired people, beggars). For economists of this period, non-productive activity is a cost on society. This interpretation gave economics a narrow focus that was rejected by many as placing wealth in the forefront and man in the background; John Ruskin referred to political economy as a "Bastard science, the science of getting riches."

WELFARE DEFINITION

Later definitions evolved to include human activity, advocating a shift toward the modern view of economics as primarily a study of man and of human welfare, not of money. Alfred Marshall in his 1890 book *Principles of Economics* wrote, "Political Economy or Economics is a study of mankind in the ordinary business of Life; it examines the part of the individual and social action which is most closely connected with the attainment and with the use of material requisites of well-being."

The welfare definition was still criticized as too narrowly materialistic. It ignores, for example, the non-material aspects of the services of a doctor or a dancer. A theory of wages which ignored all those sums paid for immaterial services was incomplete. Welfare could not be quantitatively measured, because the marginal significance of money differs from rich to the poor. Moreover, the activities of production and distribution of goods such as alcohol and tobacco may not be conducive to human welfare, but these scarce goods do satisfy human wants.

Marxist economics still focuses on a welfare definition. In addition several critiques of mainstream economics begin from the argument that current economic theory does not adequately measure welfare, but only monetized activity.

SCARCITY DEFINITION

Professor Lionel Robbins of the London School of Economics published in his 1932 book *The Nature and Significance of Economic Science* offered a definition of economics that predominates today. Robbins defines economics as "The Science which studies human behavior as a relationship between ends and scarce means which have alternative uses." In other words, economics is a science of scarcity.

This definition allowed a potentially broader field of study, but it, too, has its critics. It is most amenable to those who consider economics into a pure science, but others object that it reduces economics merely to a valuation theory. It ignores how values are fixed, prices are determined and national income is generated. It also ignores unemployment and other problems arising due to abundance. This definition cannot apply to such Keynesian concerns as cyclical instability, full employment, and economic growth.

The focus on scarcity continues to dominate neoclassical economics, which, in turn, predominates in most academic economics departments. It has been strongly criticized in recent years from a variety of quarters.

AREAS OF STUDY IN ECONOMICS

Economics is usually divided into two main branches:

Microeconomics, which examines the economic behavior of individual actors such as businesses, households, and individuals, with a view to understand decision making in the face of scarcity and the consequences of these decisions.

Macroeconomics, which examines an economy as a whole with a view to understanding the interaction between economic aggregates such as national income, employment and inflation. Note that general equilibrium theory combines concepts of a macro-economic view of the economy, but does so from a strictly constructed microeconomic viewpoint.

Attempts to join these two branches or to refute the distinction between them have been important motivators in much of recent economic thought, especially in the late 1970s and early 1980s. Today, the consensus view is arguably that good macroeconomics has solid microeconomic foundations. In other words, its premises ought to have theoretical and evidential support in microeconomics.

Economics can also be divided into numerous sub-disciplines that do not always fit neatly into the macro-micro categorization. These sub-disciplines include: international economics, labor economics, welfare economics, neuroeconomics, information economics, resource economics, ecological economics, environmental economics, managerial economics, financial economics, urban economics, mathematical econom-

ics, development economics, industrial economics, retail economics, war economics, public finance, agricultural economics, transport economics, media economics, monetary economics, economic history, economic psychology, economic sociology, economic anthropology, economic archaeology, and economic geography.

There are also methodologies used by economists whose underlying theories are important.

The most significant example may be econometrics, which applies statistical techniques to the study of economic data. Computational economics relies on mathematical methods, including econometrics.

Another trend which is more recent, and closer to microeconomics, is to use social psychology concepts (behavioural economics) and methods (experimental economics) to understand deviations from the predictions of neoclassical economics. Evolutionary economics is a novel theory espoused by Nelson and Winter (1982) along these lines that seeks to understand the role of 'routines' in driving the evolution of firm behavior.

Other subdivisions are possible. Finance has traditionally been considered a part of economics – as its body of results emerges naturally from microeconomics – but has today effectively established itself as a separate, though closely related, discipline.

There has been an increasing trend for ideas and methods from economics to be applied in wider contexts. Since economic analysis focuses on decision making, it can be applied, with varying degrees of success, to any field where people are faced with alternatives – education, marriage, health, etc. Public choice theory studies how economic analysis can apply to those fields traditionally considered outside of economics. The areas of investigation in economics therefore overlap with other social sciences, including political science and sociology. The most prevalent political economy is loosely called capitalism.

SUPPLY AND DEMAND

The supply and demand model describes how prices vary as a result of a balance between product availability and demand. The graph depicts an increase in demand from D_1 to D_2 along with the consequent increase in price and quantity required to reach a new equilibrium point on the supply curve (S).

In microeconomic theory **supply and demand** attempts to describe, explain, and predict the price and quantity of goods sold in competitive markets. It is one of the most fundamental economic models, ubiquitously used as a basic building block in a wide range of more detailed economic models and theories.

In general, the theory claims that where goods are traded in a market at a price where consumers demand more goods than businesses are prepared to supply, this shortage will tend to increase the price of the goods. Those consumers that are prepared to pay more will lead to an increase in the market price. Conversely, prices will tend to fall when the quantity supplied exceeds the quantity demanded. This process continues until the market approaches an equilibrium point, a point at which there is no longer any impetus to change. When producers are willing to supply the same quantity as buyers are willing to buy, the market is at equilibrium point where both the buyers as well as the sellers are agreeable to the price level. At this point the market is said to "clear" (fig. 1).

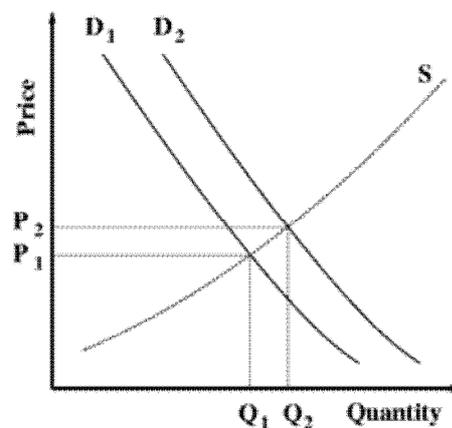


Fig. 1. Demand and supply curves

The theory of supply and demand is important in the functioning of a market economy in that it explains the mechanism by which many decisions about resource allocation are made. Neo-classical economics argues that the fundamental supply and demand relationship will hold under certain conditions described as General equilibrium.

PRICE

In order to measure the ebb and flow of supply and demand, a measurable value is needed. The oldest and most commonly used is *price*, or the going rate of exchange between buyers and sellers in a

market. Price theory, therefore, charts the movement of measurable quantities over time, and the relationship between price and other measurable variables. In Adam Smith's *Wealth of Nations*, this was the trade-off between price and convenience. A great deal of economic theory is based around prices and the theory of supply and demand. In economic theory, the most efficient form of communication comes about when changes to an economy occur through price, such as when an increase in supply leads to a lower price, or an increase in demand leads to a higher price. Exchange rates are determined by the relative supply and demand of different currencies – an important issue in international trade.

In many practical economic models, some form of "price stickiness" is incorporated to model the fact that prices do not move fluidly in many markets. Economic policy often revolves around arguments about the cause of "economic friction", or price stickiness, and which is, therefore, preventing the supply and demand from reaching equilibrium.

Another area of economic controversy is about whether price measures value correctly. In mainstream market economics, where there are significant scarcities not factored into price, there is said to be an externalization of cost. Market economics predicts that scarce goods which are under-priced are over-consumed (See social cost). This leads into public goods theory.

SCARCITY

Scarcity is central to economic theory, known more commonly as the Economic Problem, or Basic Economic Problem. Economic analysis is fundamentally about the maximization of something (leisure time, wealth, health, happiness – all commonly reduced to the concept of utility) subject to constraints. These constraints – or scarcity – inevitably define a trade-off. For example, one can have more money by working harder, but less time (there are only so many hours in a day, so time is scarce). One can have more radishes only at the expense of, for example, fewer carrots (you only have so much land on which to grow food – land is scarce).

Scarcity is defined as: when the price is zero, the quantity demanded exceeds the quantity supplied. Price is a measure of relative scarcity. When the price is rising, the commodity is becoming relatively

scarcer. When the price is falling, the commodity is becoming relatively less scarce.

Adam Smith considered, for example, the trade-off between time, or convenience, and money. He discussed how a person could live near town, and pay more for rent of his home, or live farther away and pay less, "paying the difference out of his convenience".

Trades on the floor of the New York Stock Exchange always involve a face-to-face interaction. There is one podium/desk on the trading floor for each of the exchange's three thousand or so stocks.

MARGINALISM

In marginalist economic theory, the price level is determined by the marginal cost and marginal utility. The price of all goods will be the cost of making the last one that people will purchase, and the price of all the employees in a company will be the cost of hiring the last one the business needs. Marginalism looks at decisions based on "the margins", what the cost to produce the next unit is, versus how much it is expected to return in profit. When the marginal return of an action reaches zero, the action stops. Marginal utility is how much more happiness or use a person receives from a purchase in contrast with buying less. Marginal rewards are often subject to diminishing returns: Less reward is obtained from more production or consumption. For example, the 10th bar of chocolate that a person consumes does not taste as good as the first, and so brings less marginal utility.

Marginalism became increasingly important in economic theory in the late 19th century, and is a tool which is used to analyze how economic systems will react. Marginal cost of production divides costs into "fixed" costs which must be paid regardless of how many of a commodity are produced, and "variable costs". The marginal cost is the variable cost of the last unit. Marginalism states that when the profit from the next unit will be zero, that unit will not be produced.

The marginalist theory of price level runs counter to the classical theory of price being determined by the amount of labour congealed in a commodity.

VALUE

It could be argued that beneath an economic theory is a theory of value. Value can be defined as the underlying activity which economics describes and measures. It is what is "really" happening. Representative money like this 1922 US \$100 gold note could be exchanged by the bearer for its face value in gold.

Adam Smith defined "labour" as the underlying source of value, and "the labor theory of value" underlies the work of Karl Marx, David Ricardo and many other classical economists. The "labour theory of value" argues that a good or service is worth the labour that it takes to produce. For most, this value determines a commodity's price. This labour theory of price and the closely related cost-of-production theory of value dominates the work of most classical economists, but those theories are far from the only accepted basis for "value." For example, neo-classical economists and Austrian School economists prefer the marginal theory of value.

"Market theory" argues that there is no "value" separate from price, that the market incorporates all available information into price, and that so long as markets are open, that price and the value are one and the same. This theory rests on the idea of the "rational economic actor". This was originally asserted by Mill.

Another set of theories rest on the idea that there is a basic external scarcity, and that "value" represents the relationship to that basic scarcity. These theories include those based on economics being limited by energy or based on a "gold standard".

All of these value theories are used in current economic work.

ECONOMIC LANGUAGE AND REASONING

Economics relies on rigorous styles of argument. Economic methodology has several interacting parts:

Collection of economic data. These data consist of measurable values of price and changes in price, for measurable commodities. For example: the cost to hire a worker for a week, or the cost of a particular commodity, and how much is typically used.

Formulation of models of economic relationships, for example, the relationship between the general level of prices and the general level of

employment. This includes observable forms of economic activity, such as money, consumption, preferences, buying, selling, and prices. Some of the models are simple accounting models, while others postulate specific kinds of economic behavior, such as utility or profit maximization. An example of a model that illustrates both of these aspects is the classical mathematical formulation of the Keynesian system involving the consumption function and the national income identity. This article will refer to such models as *formal models*, although they are not formal in the sense of formal logic.

Production of economic statistics. Taking the data collected, and applying the model being used to produce a representation of economic activity. For example, the "general price level" is a theoretical idea common to macroeconomic models. The specific inflation rate involves taking measurable prices, and a model of how people consume, and calculating what the "general price level" is from the data within the model. For example, suppose that diesel fuel costs 1 euro a liter: To calculate the price level would require a model of how much diesel an average person uses, and what fraction of its income is devoted to this—but it also requires having a model of how people use diesel, and what other goods they might substitute for it.

Reasoning within economic models. This process of reasoning (see the articles on informal logic, logical argument, fallacy) sometimes involves advanced mathematics. For instance, an established (though possibly unexamined) tradition among economists is to reason about economic variables in two-dimensional graphs in which curves representing relations between the axis variables are parameterized by various indices. A good example of this type of reasoning is exhibited by Paul Krugman's online essay, *There's something about macro*. See also the article IS/LM model. One critical analysis of economic reasoning is studied in Paul Samuelson's thesis, *Foundations of Economic Analysis*: he identifies a class of assertions called *operationally meaningful theorems* which are those that can be meaningfully formulated within an economic model. As usual in science, the conclusions obtained by reasoning have a predictive as well as confirmative (or dismissive) value. An example of the predictive value of economic theory is a prediction as to the effect of current deficits on interest rates 10 years into the future. An example of the confirmative value of economic theory would

be confirmation (or dismissal) of theories concerning the relation between marginal tax rates and the deficit.

Formal modeling is motivated by general principles of consistency and completeness.

Formal modeling has been adapted to some extent by all branches of economics. It is not identical to what is often referred to as mathematical economics; this includes, but is not limited to, an attempt to set microeconomics, in particular general equilibrium, on solid mathematical foundations. Some reject mathematical economics: The Austrian School of economics believes that anything beyond simple logic is often unnecessary and inappropriate for economic analysis. In fact, the entire empirical-deductive framework sketched in this section may be rejected outright by that school. However, the framework sketched here accurately represents the current predominant view of economics.

DEVELOPMENT OF ECONOMIC THOUGHT

The term *economics* was coined around 1870 and popularized by influential "neoclassical" economists such as Alfred Marshall (Welfare definition), as a substitute for the earlier term political economy, which referred to "the economy of polities" – competing states. The term *political economy* was used through the 18th and 19th centuries, with **Adam Smith**, David Ricardo and Karl Marx as its main thinkers and which today is frequently referred to as the "classical" economic theory. Both "economy" and "economics" are derived from the Greek *oikos*- for "house" or "settlement", and *nomos* for "laws" or "norms".

Economic thought may be roughly divided into three phases: Pre-modern (Greek, Roman, Arab), Early modern (mercantilist, physiocrats) and Modern (since Adam Smith in the late 18th century). Systematic economic theory has been developed mainly since the birth of the modern era.

MODERN 'MAINSTREAM' ECONOMICS

Most academic economics today begins with the premise that resources are scarce and that it is necessary to choose between competing alternatives. That is, economics deals with tradeoffs. With scarcity, choosing one alternative implies forgoing another alternative—the oppor-

tunity cost. The opportunity cost creates an implicit price relationship between competing alternatives. In addition, in both market oriented and planned economies, scarcity is often explicitly quantified by price relationships.

Understanding choices by individuals and groups is central. Economists believe that incentives and desires play an important role in shaping decision making. Concepts from the Utilitarian school of philosophy are used as analytical concepts within economics, though economists appreciate that society may not adopt utilitarian objectives. One example of this is the idea of a utility function, which is assumed to represent how economic agents rank the choices given to them. Then the utility function ranks available choices from best to worst, and the agent gradually learns to choose the best-ranked choice in the feasible set of his alternatives.

Most economists also acknowledge the existence of market failure and many insights from Keynesian economics. They look to game theory and asymmetric information to solve problems on a microeconomic level.

NEO-CLASSICAL ECONOMICS

Economists who believe that models based on utility maximisation are applicable to a wide range of activities, including the very long term and the non-economic, are often referred to as neo-classical economists.

On a microeconomic level, some economists extend economic analysis to all personal decisions. An alternative can be thought of as a vector where the entries are answers not only to questions like "How many eggs should I buy?", but also "How many hours should I spend with my kids?", and "How long should I spend brushing my teeth?"

On a macroeconomic level, neoclassical economists are generally in favor of supply-side rather than demand-side intervention. Monetarism is a neo-classical macroeconomic idea.

An outgrowth of neo-classical economics is rational expectations, which differs from neo-classical economics in that it does not see a micro-economic foundation for macro-economic behavior, and it emphasizes the strategies of rational economic actors in creating macro-effects.

ECONOMICS AND OTHER DISCIPLINES

There is some tension between economics and theories of ethics, historically a branch of philosophy, which emphasizes how people ought to conduct ourselves and balances of rights and duties. Modern economics deals with this tension explicitly: According to some thinkers, a theory of economics is also, or implies also, a theory of moral reasoning. One way economists deal with this is to qualify discussions of economic choice by noting the qualifier *ceteris paribus* ("all other things held constant...") referring to moral or social factors that are (for the sake of argument) held equivalent for all choices that one might make.

Another premise is that economics fits within a finite ecosystem where there are at least some abundant resources. For instance, when fueling a fire, people are usually concerned with finding the wood, and not with finding the air to burn it with. Economics explicitly does not deal with free abundant inputs – one criticism is that it often conflicts with ecology's view of what affects what. Human beings are, according to ecologists, merely one species participating in a vast energy system on this planet – economy is a subset of ecology that deals with just one species' habits and wants.

A third premise is that economics suggests market forms and other means of distribution of scarce goods that affect not just "desires and wants" but also "needs" and "habits". Much of so-called economic "choice" is involuntary, certainly given the conditioning that people have to expect certain quality of life. This leads to one of the most hotly debated areas in economic policy: namely, the effect and efficacy of welfare policies. Libertarians, view this as a failure to respect economic reasoning. They argue that redistribution of wealth is morally and economically wrong. And socialists view it as a failure of economics to respect society. They argue that disparities of wealth should not have been allowed in the first place. This led to both 19th century labour economics and 20th century welfare economics before being subsumed into human development theory.

The older term for economics, *political economy*, is still often used *instead of economics*, especially by certain economists such as Marxists. Use of this term often signals a basic disagreement with the terminology or paradigm of market economics. Political economy explicitly brings political considerations into economic analysis and is therefore

openly normative, although this can be said of many economic recommendations as well, despite claims to being positive. Some mainstream universities (such as the University of Toronto and many in the United Kingdom) have a "political economy" department rather than an "economics" department.

Information theory has been applied to economics since the work of Ronald Coase in the 1930s. However, with Herbert Simon and John von Neumann in the 1950s, it gathered a more specific formalism as part of game theory. This emphasizes that the decision-making process itself is costly.

Marxist economics generally denies the trade-off of time for money. In the Marxist view, concentrated control over the means of production is the basis for the allocation of resources among classes. Scarcity of any particular physical resource is subsidiary to the central question of power relationships embedded in the means of production.

ECONOMIC SYSTEM

An **economic system** is a mechanism which deals with the production, distribution and consumption of goods and services in a particular society.

The economic system is composed of people, institutions and their relationships. It addresses the problems of economics, like the allocation and scarcity of resources.

There are several basic questions that must be answered in order to resolve the problems of economics satisfactorily. For example, the scarcity problem requires answers to basic questions, such as: *what* to produce, *how* to produce it, and *who* gets what is produced. An economic system is a way of answering these basic questions. Different economic systems answer them differently.

Please note that there is often a strong correlation between certain ideologies, political systems and certain economic systems (for example, consider the meanings of the term "communism"). Many economic systems overlap each other in various areas (for example, the term "mixed economy" can be argued to include elements from various systems). There are also various mutually exclusive hierarchical categorizations.

The most basic and general economic systems are:

market economy (the basis for several "right-wing" systems, such as capitalism);

mixed economy (arguably the "centrist" economic system);

planned economy (the basis for several "left-wing" systems, such as socialism);

traditional economy (a generic term for the oldest and traditional economic systems);

participatory economics (a recent proposal for a new economic system).

An economic system can be considered a part of the social system and hierarchically equal to the law system, political system, cultural system, etc.

DEMAND

Demand is that quantity of a good that consumers are not only willing to buy but also have the capacity to buy at the given price. For example, a consumer may be willing to purchase 2 lb of potatoes if the price is \$0.75 per lb. However, the same consumer may be willing to purchase only 1 lb if the price is \$1.00 per lb. A demand schedule can be constructed that shows the quantity demanded at each given price. It can be represented on a graph as a line or curve by plotting the quantity demanded at each price. It can also be described mathematically by a demand equation. The main determinants of the quantity one is willing to purchase will typically be the price of the good, one's level of income, personal tastes, the price of substitute goods, and the price of complementary goods.

Simple supply and demand curves

Mainstream economic theory centers on creating a series of supply and demand relationships, describing them as equations, and then adjusting for factors which produce "stickiness" between supply and demand. Analysis is then done to see what "trade offs" are made in the "market", which is the negotiation between sellers and buyers. Analysis is done as to what point the ability of sellers to sell becomes less useful than other opportunities. This is related to "marginal" costs, or the price

to produce the last unit that can be sold profitably, versus the chance of using the same effort to engage in some other activity.

The slope of the demand curve (downward to the right) indicates that a greater quantity will be demanded when the price is lower. On the other hand, the slope of the supply curve (upward to the right) tells us that as the price goes up, producers are willing to produce more goods. The point where these curves intersect is the **equilibrium point**. At a price of P producers will be willing to supply Q units per period of time and buyers will demand the same quantity. P in this example, is the equilibrating price that equates supply with demand.

In the figures, straight lines are drawn instead of the more general curves. This is typical in analysis looking at the simplified relationships between supply and demand because the shape of the curve does not change the general relationships and lessons of the supply and demand theory. The shape of the curves far away from the equilibrium point are less likely to be important because they do not affect the market clearing price and will not affect it unless large shifts in the supply or demand occur. So straight lines for supply and demand with the proper slope will convey most of the information the model can offer. In any case, the exact shape of the curve is not easy to determine for a given market. The general shape of the curve, especially its slope near the equilibrium point, does however have an impact on how a market will adjust to changes in demand or supply (fig. 2).

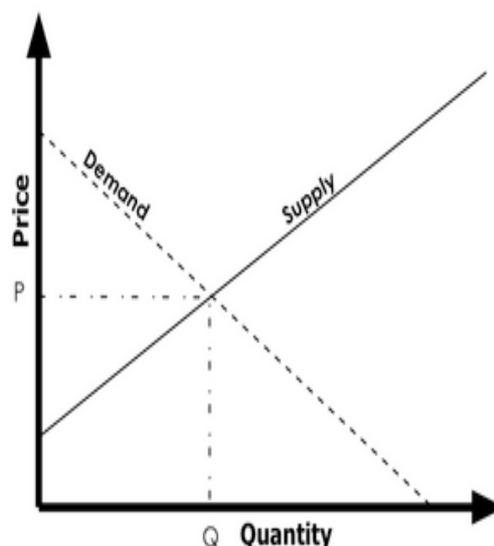


Fig. 2. Graph of simple supply and demand curves

It should be noted that on supply and demand curves both are drawn as a function of price. Neither is represented as a function of the other. Rather the two functions interact in a manner that is representative of market outcomes. The curves also imply a somewhat neutral means of measuring price. In practice any currency or commodity used to measure price is also the subject of supply and demand.

EFFECTS OF BEING AWAY FROM THE EQUILIBRIUM POINT

Consider how prices and quantities not at the equilibrium point tend to move towards the equilibrium. Assume that some organization (say government or industry cartel) has the ability to set prices. If the price is set too high, such as at P_1 in the diagram to the right, then the quantity produced will be Q_s . The quantity demanded will be Q_d . Since the quantity demanded is less than the quantity supplied there will be an oversupply (also called surplus or excess supply). On the other hand, if the price is set too low, then too little will be produced to meet demand at that price. This will cause an undersupply problem (also called a shortage) (fig. 3).

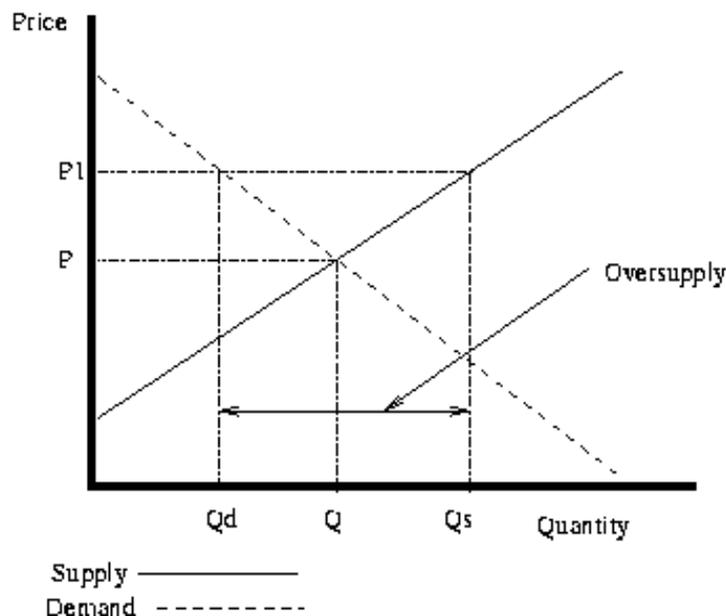


Fig. 3. Shortage

Now assume that individual firms have the ability to alter the quantities supplied and the price they are willing to accept, and consum-

ers have the ability to alter the quantities that they demand and the amount they are willing to pay. Businesses and consumers will respond by adjusting their price (and quantity) levels and this will eventually restore the quantity and the price to the equilibrium.

In the case of too high a price and oversupply (fig. 4), the profit-maximizing businesses will soon have too much excess inventory, so they will lower prices (from P_1 to P) to reduce this. Quantity supplied will be reduced from Q_s to Q and the oversupply will be eliminated. In the case of too low a price and undersupply, consumers will likely compete to obtain the good at the low price, but since more consumers would like to buy the good at the price that is too low, the profit-maximizing firm would raise the price to the highest they can, which is the equilibrium point. In each case, the actions of independent market participants cause the quantity and price to move towards the equilibrium point.

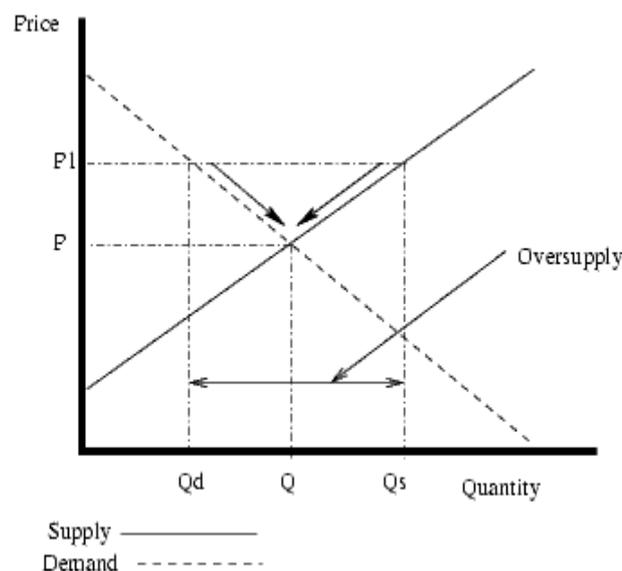


Fig. 4. High price and oversupply

DEMAND CURVE SHIFTS

When more people want something, the quantity demanded at all prices will tend to increase. This can be referred to as an *increase in demand*. The increase in demand could also come from changing tastes, where the same consumers desire more of the same good than they previously did. Increased demand can be represented on the graph as the curve being shifted right, because at each price point, a greater quantity

is demanded. An example of this would be more people suddenly wanting more coffee. This will cause the demand curve to shift from the initial curve D_0 to the new curve D_1 . This raises the equilibrium price from P_0 to the higher P_1 . This raises the equilibrium quantity from Q_0 to the higher Q_1 . In this situation, we say that there has been an *increase* in demand which has caused an *extension* in supply (fig. 5).

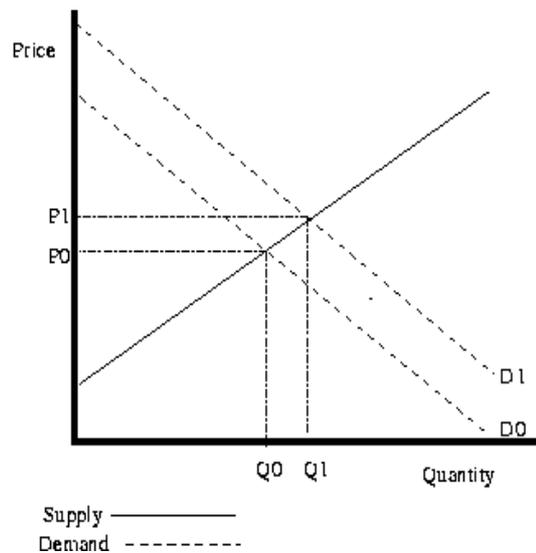


Fig. 5. Demand curve

Conversely, if the demand decreases, the opposite happens. If the demand starts at D_1 and then *decreases* to D_0 , the price will decrease and the quantity supplied will decrease—a *contraction* in supply. Notice that this is purely an effect of demand changing. The quantity supplied at each price is the same as before the demand shift (at both Q_0 and Q_1). The reason that the equilibrium quantity and price are different is the demand is different.

Supply curve shifts

When the suppliers' costs change the supply curve will shift. For example, assume that someone invents a better way of growing wheat so that the amount of wheat that can be grown for a given cost will increase. Producers will be willing to supply more wheat at every price and this shifts the supply curve S_0 to the right, to S_1 – an *increase in supply*. This causes the equilibrium price to decrease from P_0 to P_1 . The equilibrium quantity increases from Q_0 to Q_1 as the quantity demanded increases at the new lower prices. Notice that in the case of a

supply curve shift, the price and the quantity move in opposite directions (fig. 6).

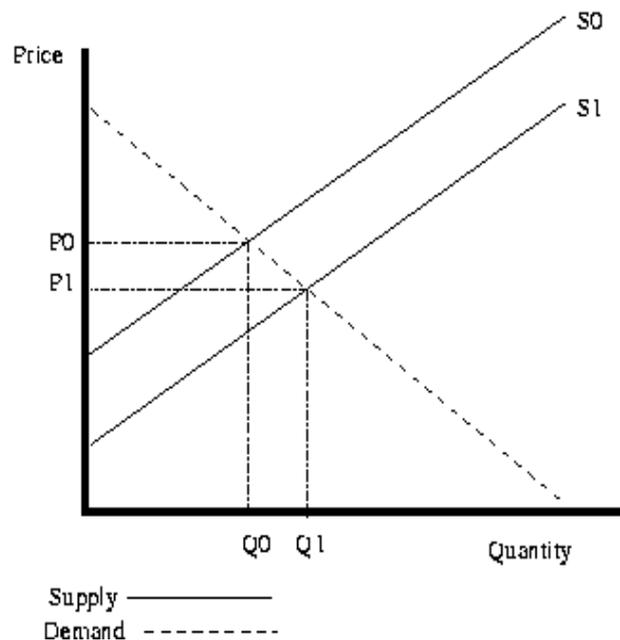


Fig. 6. Supply curve

Conversely, if the quantity supplied *decreases*, the opposite happens. If the supply curve starts at S_1 and then shifts to S_0 , the equilibrium price will increase and the quantity will decrease. Notice that this is purely an effect of supply changing. The quantity demanded at each price is the same as before the supply shift (at both Q_0 and Q_1). The reason that the equilibrium quantity and price are different is the *supply* is different.

Market "clearance"

The market "clears" at the point where all the supply and demand at a given price balance. That is, the amount of a commodity available at a given price equals the amount that buyers are willing to purchase at that price. It is assumed that there is a process that will result in the market reaching this point, but exactly what the process is in a real situation is an ongoing subject of research. Markets which do not clear will react in some way, either by a change in price, or in the amount produced, or in the amount demanded. Graphically the situation can be represented by two curves: one showing the price-quantity combinations buyers will pay for, or the demand curve; and one showing the combi-

nations sellers will sell for, or the supply curve. The market clears where the two are in equilibrium, that is, where the curves intersect. In a general equilibrium model, all markets in all goods clear simultaneously and the "price" can be described entirely in terms of tradeoffs with other goods. For a century most economists believed in Say's Law, which states that markets, as a whole, would always clear and thus be in balance.

ELASTICITY

An important concept in understanding supply and demand theory is **elasticity**. In this context, it refers to how supply and demand change in response to various stimuli. One way of defining elasticity is the percentage change in one variable divided by the percentage change in another variable (known as *arch elasticity* because it calculates the elasticity over a range of values, in contrast with *point elasticity* that uses differential calculus to determine the elasticity at a specific point). Thus it is a measure of *relative* changes.

Often, it is useful to know how the quantity supplied or demanded will change when the price changes. This is known as the **price elasticity of demand** and the **price elasticity of supply**. If a monopolist decides to increase the price of their product, how will this affect their sales revenue? Will the increased unit price offset the likely decrease in sales volume? If a government imposes a tax on a good, thereby increasing the effective price, how will this affect the quantity demanded?

If you do not wish to calculate elasticity, a simpler technique is to look at the slope of the curve. Unfortunately, this has units of measurement of quantity over monetary unit (for example, liters per euro, or battleships per million yen), which is not a convenient measure to use for most purposes. So, for example, if you wanted to compare the effect of a price change of gasoline in Europe versus the United States, there is a complicated conversion between gallons per dollar and liters per euro. This is one of the reasons why economists often use relative changes in percentages, or elasticity. Another reason is that elasticity is more than just the slope of the function: It is the slope of a function in a coordinate space, that is, a line with a constant slope will have different elasticity at various points.

Let's do an example calculation. We have said that one way of calculating elasticity is the percentage change in quantity over the percentage change in price. So, if the price moves from \$1.00 to \$1.05, and the quantity supplied goes from 100 pens to 102 pens, the slope is $2/0.05$ or 40 pens per dollar. Since the elasticity depends on the percentages, the quantity of pens increased by 2%, and the price increased by 5%, so the elasticity is $2/5$ or 0.4.

Since the changes are in percentages, changing the unit of measurement or the currency will not affect the elasticity. If the quantity demanded or supplied changes a lot when the price changes a little, it is said to be elastic. If the quantity changes little when the prices changes a lot, it is said to be inelastic. An example of perfectly inelastic supply, or zero elasticity, is represented as a vertical supply curve. (See that section below)

Elasticity in relation to variables other than price can also be considered. One of the most common to consider is income. How would the demand for a good change if income increased or decreased? This is known as the **income elasticity of demand**. For example, how much would the demand for a luxury car increase if average income increased by 10%? If it is positive, this increase in demand would be represented on a graph by a positive shift in the demand curve, because at all price levels, a greater quantity of luxury cars would be demanded.

Another elasticity that is sometimes considered is the **cross elasticity of demand**, which measures the responsiveness of the quantity demanded of a good to a change in the price of another good. This is often considered when looking at the relative changes in demand when studying **complement** and **substitute goods**. Complement goods are goods that are typically utilized together, where if one is consumed, usually the other is also. Substitute goods are those where one can be substituted for the other, and if the price of one good rises, one may purchase less of it and instead purchase its substitute.

Cross elasticity of demand is measured as the percentage change in demand for the first good that occurs in response to a percentage change in price of the second good. For an example with a complement good, if, in response to a 10% increase in the price of fuel, the quantity of new cars demanded decreased by 20%, the cross elasticity of demand would be $-20\%/10\%$ or, -2 .

VERTICAL SUPPLY CURVE

It is sometimes the case that the supply curve is vertical: that is the quantity supplied is fixed, no matter what the market price. For example, the amount of land in the world can be considered fixed. In this case, no matter how much someone would be willing to pay for a piece of land, the extra cannot be created. Also, even if no one wanted all the land, it still would exist. These conditions create a vertical supply curve, giving it zero elasticity (i.e., no matter how large the change in price, the quantity supplied will not change).

In the short run near vertical supply curves are even more common. For example, if the Super Bowl is next week, increasing the number of seats in the stadium is almost impossible. The supply of tickets for the game can be considered vertical in this case. If the organizers of this event underestimated demand, then it may very well be the case that the price that they set is below the equilibrium price. In this case there will likely be people who paid the lower price who only value the ticket at that price, and people who could not get tickets, even though they would be willing to pay more. If some of the people who value the tickets less sell them to people who are willing to pay more (i.e., scalp the tickets), then the effective price will rise to the equilibrium price.

The graph below illustrates a vertical supply curve. When the demand 1 is in effect, the price will be p_1 . When demand 2 is occurring, the price will be p_2 . Notice that at both values the quantity is Q . Since the supply is fixed, any shifts in demand will only affect price (fig. 7).

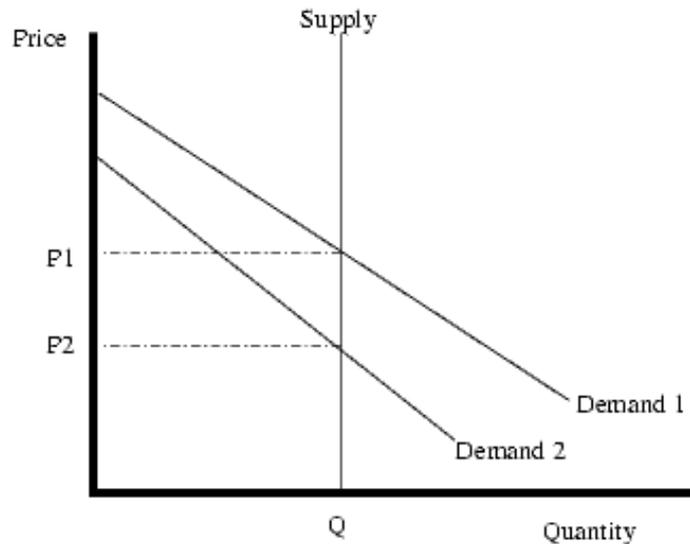


Fig. 7. Vertical supply curve

OTHER MARKET FORMS

In a situation in which there are many buyers but a single **monopoly** supplier that can adjust the supply or price of a good at will, the monopolist will adjust the price so that his profit is maximized given the amount that is demanded at that price. This price will be higher than in a competitive market. A similar analysis using supply and demand can be applied when a good has a single buyer, a **monopsony**, but many sellers.

Where there are both few buyers or few sellers, the theory of supply and demand cannot be applied because both decisions of the buyers and sellers are interdependent—changes in supply can affect demand and vice versa. **Game theory** can be used to analyze this kind of situation. (See also **oligopoly**.)

The supply curve does not have to be linear. However, if the supply is from a profit-maximizing firm, it can be proven that supply curves are not downward sloping (i.e., if the price increases, the quantity supplied will not decrease). Supply curves from profit-maximizing firms can be vertical, horizontal or upward sloping. While it is possible for industry supply curves to be downward sloping, supply curves for individual firms are never downward sloping.

Standard microeconomic assumptions cannot be used to prove that the demand curve is downward sloping. However, despite years of searching, no generally agreed upon example of a good that has an up-

ward-sloping demand curve has been found (also known as a **giffen good**). Non-economists sometimes think that certain goods would have such a curve. For example, some people will buy a luxury car because it is expensive. In this case the good demanded is actually prestige, and not a car, so when the price of the luxury car decreases, it is actually changing the amount of prestige so the demand is not decreasing since it is a different good. Even with downward-sloping demand curves, it is possible that an increase in income may lead to a decrease in demand for a particular good, probably due to the existence of more attractive alternatives which become affordable: a good with this property is known as an **inferior good**.

DECISION MAKING

Much of economics assumes that individuals seek to maximize their happiness or utility; however, whether they rationally attempt to optimize their well-being given available information is a source of much debate. In this view, which underpins much of economic writing, individuals make choices between alternatives based on their estimation of which will yield the best results. Many important economic ideas, such as the "efficient market hypothesis", rest on this view of decision making.

However, this framework, once called "homo economicus", has for decades been the focus of unease even by those who apply it. Milton Friedman once defended the idea by saying that inaccurate assumptions could produce accurate results. Alfred Marshall was careful to differentiate the tendency to maximize happiness with maximizing economic well-being. The limits of rationality have been the subject of intense study, for example, Herbert Simon's model for "bounded rationality", which was awarded a Nobel Prize in 1978. More recently, irrational behavior and imperfect information have increasingly been the subject of formal modeling, often referred to as behavioral economics, for which Daniel Kahneman won a Nobel Prize in 2002. An example is the growing field of behavioral finance, which combines previous theory with cognitive psychology.

The new model of information and decision making focuses on asymmetrical information, when some participants have key facts that

others do not, and on decision making based not on the economic pressures but on the decisions of other economic actors. Asymmetrical information and behavioral dynamics lead to different conclusions: in a world of asymmetrical information, markets are generally not efficient, and inefficiencies grow up as means of hedging against information. While not yet universally accepted, it is increasingly influential in policy, for example, the writing of Joseph Stiglitz and financial modeling.

HISTORY OF SUPPLY AND DEMAND

Attempts to determine how supply and demand interact began with Adam Smith's *The Wealth of Nations*, first published in 1776. In this book, he mostly assumed that the supply price was fixed but that the demand would increase or decrease as the price decreased or increased. David Ricardo in 1817 published the book *Principles of Political Economy and Taxation*, in which the first idea of an economic model was proposed. In this, he more rigorously laid down the idea of the assumptions that were used to build his ideas of supply and demand.

During the late 19th century the marginalist school of thought emerged. This field mainly was started by Stanley Jevons, Carl Menger, and Léon Walras. The key idea was that the price was set by the most expensive price, that is, the price at the margin. This was a substantial change from Adam Smith's thoughts on determining the supply price.

Finally, most of the basics of the modern school theory of supply and demand were finalized by Alfred Marshall and Léon Walras, when they combined the ideas about supply and the ideas about demand and began looking at the equilibrium point where the two curves crossed. They also began looking at the effect of markets on each other. Since the late 19th century, the theory of supply and demand has mainly been unchanged. Most of the work has been in examining the exceptions to the model (like oligarchy, transaction costs, non-rationality).

CRITICISM OF MARSHALL'S THEORY OF SUPPLY AND DEMAND

Marshall's theory of supply and demand runs counter to the ideas of economists from Adam Smith and David Ricardo through the crea-

tion of the marginalist school of thought. Although Marshall's theories are dominant in elite universities today, not everyone has taken the fork in the road that he and the marginalists proposed. One theory counter to Marshall is that price is already known in a commodity before it reaches the market, negating his idea that some abstract market is conveying price information. The only thing the market communicates is whether or not an object is exchangeable or not (in which case it would change from an object to a commodity). This would mean that the producer creates the goods without already having customers – blindly producing, hoping that someone will buy them ("buy" meaning exchange money for the commodities). Modern producers often have market studies prepared well in advance of production decisions; however, misallocation of factors of production can still occur.

Keynesian economics also runs counter to the theory of supply and demand. In Keynesian theory, prices can become "sticky" or resistant to change, especially in the case of price decreases. This leads to a market failure. Modern supporters of Keynes, such as Paul Krugman, have noted this in recent history, such as when the Boston housing market dried up in the early 1990s, with neither buyers nor sellers willing to exchange at the price equilibrium.

Gregory Mankiw's work on the irrationality of actors in the markets also undermines Marshall's simplistic view of the forces involved in supply and demand.

Part III. TESTS FOR COMPREHENSION

Chicago's Restaurants

Chicago is known worldwide for its wonderful restaurants. But you haven't really-dined there until you've enjoyed a fine meal in a place that can claim a dining room with a good view. From a skyscraper bird's-eye view of the city to an *alfresco* table along the Chicago River, some of the leading restaurants can offer the visitor a dinner that, will be picture perfect.

The 95th, located high atop the John Hancock Center, is an elegant affair of huge chrysal chandeliers; colorful draperies and white-clothed tables topped with fresh flowers and flickering candles. But the dining room's greatest design asset is the floor-to-ceiling windows that provide a frame for the spectacular view. From 95 floors up, Chicago becomes a beautiful panorama of breathtaking architecture, blue sailboat-riddled water and sparkling city night lights. If you time your dinner just right, you can witness the dramatic changing face of the city from daytime into evening.

1. What are Chicago's restaurants known for?
 - a) They are located outside the city centre not to be overcrowded.
 - b) The food is cheap and good.
 - c) They command a good view.
 - d) They are mostly located on sailboats.

2. Your impression of a good restaurant is not complete unless:
 - a) you've dined in a room with a good view;
 - b) you've seen perfect pictures on the walls of a dining room;
 - c) you've been sitting in a restaurant from daytime till night;
 - d) you've got a table with candles and flowers.

3. What view can you not get from the 95th?
 - a) sailboat-riddled water of the Chicago River;
 - b) the changing face of the evening city;
 - c) faces of the passers by;
 - d) sparkling night lights.

4. What is not true about the 95th?
 - a) There are white-clothed tables.
 - b) There are fresh flowers on the tables.
 - c) There are windows on the ceiling.
 - d) There are chrystal chandeliers and flickering candles.

Easter Island

Easter Island, 3000 kilometers from the coast of Chile, is about as big as Jersey. When the first European navigator, a Dutchman, landed there in 1722, he thought it was inhabited by giants. Towering over this little piece of volcanic land in Polynesia 593 enormous statues met his eye. Some of them are more than 20 meters high and weigh 50 tons. Examination of these monuments reveals, it is thought, three levels of civilization, the most advanced being the oldest. As in Egypt, the enormous blocks of tuff-stone, basalt and lava are adjusted with great skill. The island, however, is hilly and a few trees could not have provided enough rollers.

In the 19 century, the inhabitants of Easter Island numbered 200 - three times less than the number of their statues, and there can never have been more than 3 or 4 thousand inhabitants on this island, where the land is fertile, but there are no animals.

The first Europeans to visit Easter Island discovered that the inhabitants included a race of white men with beards. There are references in legends to a Master Race of Teachers, of great antiquity.

1. Where is Easter Island situated?
 - a) in Chile;
 - b) in Jersey;
 - c) in Polynesia;
 - d) in Egypt.

2. Which description of the island is not true?
 - a) It is rather small.
 - b) The land is hilly and fertile.
 - c) There are almost no trees there.
 - d) There are many animals in the hills.

3. What information about the statues is correct?

- a) The number of the statues is 2 times greater than that of the population of the island in the 19th century.
- b) The statues are made of enormous blocks of marble and lava.
- c) According to legends, the gigantic statues are connected with a race of white men fallen from the skies.
- d) According to the examination of the statues, the oldest level of civilization was the most primitive.

4. What is true about the islanders?

- a) The island is inhabited by giants.
- b) They have fallen from the skies.
- c) The population is very numerous.
- d) Their civilization is quite old.

A glimpse into Egyptian riches

During some five thousand years, or perhaps even longer, Egypt, protected by the natural barriers of desert from barbarian hordes, had developed probably the most remarkable and wealthy civilization the world has ever known. Its two greatest cities, Memphis and Thebes, each had over five million inhabitants which make them greater than any city, with the one exception of London, in pre-war Europe. In Thebes particularly, the accumulated wealth in gold and jewels in the temples passes imagination, because it was the Sacred city of the great XVIIIth, XIXth and XXth Dynasties which conquered the whole of Palestine right down to Mesopotamia and added wealth of many other long-civilized people to their own.

Long before 525 B.C. the peak of conquest had passed, and in that year came the Persian invasion. Having deposed the reigning Pharaoh, the Persian king Cambyses became the new monarch in Thebes. Yet he was not content with having taken the London of the ancient world and, like Alexander who came after him, he looked for the fresh worlds to conquer.

1. Ancient Egypt was protected from barbarian hordes by:

- a) the strong army;
- b) mountains;

- c) the desert;
- d) the sea.

2. Which statement is not true? Memphis and Thebes were greater than any city in:

- a) Egypt;
- b) Persia;
- c) Palestine;
- d) pre-war Europe.

3. When did the Dynasties of Pharaohs accumulate their wealth?

- a) in 525 B.C.
- b) after 525 B.C.
- c) during some five hundred years B.C.
- d) during some five thousand years before 525 B.C.

4. What treasures were not accumulated in the temples of Thebes?

- a) gold images;
- b) silver utensils;
- c) sand dust;
- d) jewels.

5. Which statement is wrong? Thebes was:

- a) the sacred city of the XIX Dynasty;
- b) the capital of Cambyses;
- c) the city with many temples;
- d) greater than London of our time.

6. Who ruled in Egypt after 525 B.C?

- a) Alexander;
- b) Cambyses;
- c) Pharaoh
- d) Palestinian king

A holography exhibition

Quickly becoming a Chicago tradition is "Around the Coyote", a free art festival and artists' studio walk began three years ago to encour-

age people to learn about the diversity and wealth of Chicago's artistic community. Organized by a non-profit, multimedia art association of the same name. "Around the Coyote" takes its name from the Northwestern Tower Building (located in the center of the festival area) which was nicknamed "The Coyote" by residents of Bucktown and Wicker Park. The name came from a former gallery, Coyote Tower Gallery, which was located in the first floor of this building. The owner named his gallery after the wolf because, like a coyote, an artist is always fighting to survive.

The festival will take place in Wicker Park / Bucktown neighborhoods. Hundreds of local artists working in all types of media – computer arts, painting, sculpture, photography, literature, performance, theatre, film, video, mural, operatic theatre and architecture – will open their studios, or exhibit in public spaces, for three-day event.

1. What does the festival take its name from?
 - a) the desert;
 - b) the Northwest;
 - c) the nickname of the owner;
 - d) the nickname of the building.

2. What does the word "coyote" mean?
 - a) a free artist;
 - b) a wolf;
 - c) the Northwestern Tower building;
 - d) a stray dog.

3. The owner named the gallery "The Coyote" because:
 - a) he liked coyotes;
 - b) his life was like a coyote's;
 - c) an artist's life is like a coyote's;
 - d) artists like to draw coyotes.

4. Who will not participate in the festival?
 - a) actors;
 - b) artists;
 - c) scientific programmers;
 - d) architects.

5. How much time will the event last?
- a) three years;
 - b) one evening;
 - c) three days;
 - d) three hours.

The free art festival

The inventor of holography, Dennis Gabor, coined the name of his invention from the Greek *holos*, which means "whole", and from *graphis*, which means "image". Since the day when he invented it back in 1947, many people in many different professions have taken it up. The exhibition aims to entertain and educate and also to explain this medium.

The exhibition is divided into five sections. The first deals with techniques, the second with the history of the medium, the third section displays the artistic exploration of holography. The final two sections touch on the daily uses of holography and on the "fun" aspect in a small children's section.

Perhaps the most interesting part in the exhibition was that which deals with the practical application of holography. It seems that soon dentists will use holograms to show their patients exactly which tooth they have treated. A holographic disc can be used at the checkout counter of the supermarket to calculate the cost of the weekly shopping basket.

Before long the holograph will have ceased to be a wonder and will have become a commonplace.

1. When was holography invented?
 - a) in the days of the ancient Greeks;
 - b) in the beginning of this century;
 - c) in the late 1940s;
 - d) nowadays.

2. What is the corresponding Greek word to the English "whole"?
 - a) graphis;
 - b) image;

- c) hole;
- d) holos.

3. Which is not the aim of the exhibition?

- a) to explain holography;
- b) to entertain people;
- c) to show practical application of holography;
- d) to advertise and sell the exhibits.

4. The most interesting section of the exhibition deals with:

- a) the history of holography;
- b) the techniques of holography;
- c) the daily uses of holography;
- d) the "fun" aspect of holography.

5. What is the number of the section demonstrating the use of holography in art?

- a) one;
- b) two;
- c) three;
- d) five.

Simple joys

It is important that you should learn to enjoy simple joys, because that is extremely English. All serious Englishmen play darts and cricket and many other games; a famous English statesman was reported to be catching butterflies in the interval between giving up two European states to the Germans; during the war there was even some misunderstanding with the French because they considered the habit of English soldiers of singing and playing football and hide-and-seek and blind man's bluff slightly childish.

Dull and pompous foreigners are unable to understand why ex-cabinet ministers get together and sing Daisy, Daisy in choir; why serious businessmen play with toy locomotives while their children learn trigonometry in the adjoining room; why High Court judges collect rare birds when rare birds are rare and they cannot collect many in any case.

They cannot grasp why people sing when alone and yet sit silent and dumb for hours on end in their clubs, not uttering a word for months in the most distinguished company and consider themselves privileged.

1. What did the British soldiers not do in France during the war?
 - a) play hide-and-peek with French girls;
 - b) play football with German soldiers;
 - c) sing songs in choir;
 - d) fight against German soldiers.

2. What game do serious Englishmen not play?
 - a) darts;
 - b) cricket;
 - c) ice hockey;
 - d) blind man's bluff.

3. What is considered an improper thing for an Englishman to do?
 - a) to sing when alone;
 - b) to sing in choir;
 - c) to keep long silence in the club;
 - d) to boast in a distinguished company.

4. Which of the following statements is wrong?
 - a) Ex-cabinet ministers like to sing *Daisy, Daisy*.
 - b) High Court judges collect rare birds.
 - c) Serious businessmen never play with toys.
 - d) A famous statesman liked to catch butterflies.

Gardening

If, as it was in our grandfathers' time, gardening remains one of the most popular pastimes in Britain, one must at least remark on the change of attitude on the part of gardeners in recent years. It is no longer a question of merely growing enough fruit and vegetables to provide food in the winter and flowers to give color in the summer. Changes in our eating habits together with the advent of the freezer, plus the availability of new varieties of seeds, have led to this new approach. Now the

aim is to sow quick growing, more exotic items and value them for their price-saving rather than life-saving qualities.

Even with the basic root crops, carrots being the prime example, this may now be observed. They are sown in early summer and pulled in August while still very small in size as this leaves the ground free to bear another crop before autumn.

1. What did not influence the change of attitude on the part of gardeners?

- a) new eating habits;
- b) new methods of gardening;
- c) availability of new seeds;
- d) new possibilities of freezing the products;

2. Which was not the aim of gardeners in the past?

- a) to provide food in winter;
- b) to get two crops in summer;
- c) to have food with life-saving qualities;
- d) to grow flowers for pleasure.

3. Which is not the aim of new gardeners?

- a) to sow quick growing basic items;
- b) to sow quick growing exotic items;
- c) to obtain items with good price-saving qualities;
- d) to obtain items with good life-saving qualities.

Christmas

Most people in Britain see Christmas as the major festival of the year – an occasion for parties, giving and receiving gifts, eating and drinking, and generally having fun.

The many non-religious traditions associated with Christmas are in fact not very old, dating back only to the 19th century. These are mostly for children. On Christmas Eve, children hang stockings at the end of their beds or over the fireplace. They are told that Father Christmas, or Santa Claus, arrives at night from the North Pole on his flying sleigh pulled by flying reindeer, climbs down the chimney and fills each

stocking with presents. The children open their presents on Christmas morning.

At Christmas people decorate their houses with holly, ivy and mistletoe and children hang paper streamers (ribbons of colored paper). Decorating a house with mistletoe is a very old custom which may have something to do with the Druidical belief in its powers of fertility. The custom is to hang mistletoe from the ceiling, for people to kiss under.

A traditional feature of Christmas is the Christmas tree. Queen Victoria and Prince Albert popularized this German tradition in Britain. The first Christmas trees were introduced there about 160 years ago.

Lunch is the most important point of Christmas Day. The traditional lunch consists of roast turkey with vegetables, followed by Christmas (plum) pudding made with dried fruit and brandy. Sometimes a coin is put in the pudding as a surprise.

Later, in the afternoon you may be visited by carol singers, who go around towns and villages singing Christmas songs, such as *Good King Wenceslas* or *The First Noel*, and collecting money for charity.

1. The first Christmas tree was introduced to Britain about:
 - a) 1920s;
 - b) 1830s;
 - c) 1950s;
 - d) 1870s.

2. Where does the tradition of decorating a house with mistletoe at Christmas come from?
 - a) Germany;
 - b) The Druids;
 - c) Turkey;
 - d) France.

3. Who made the Christmas tree popular in Britain?
 - a) Father Christmas;
 - b) Queen Elizabeth II;
 - c) Queen Victoria;
 - d) Good King Wenceslas.

4. Which of the following would you not use to decorate your house at Christmas time?
- a) mistletoe;
 - b) holly;
 - c) stockings;
 - d) streamers.
5. What would you expect to find in a Christmas stocking?
- a) carols;
 - b) money;
 - c) old clothes;
 - d) small presents.
6. Which of those things would you not find on your plate at Christmas?
- a) turkey;
 - b) ivy;
 - c) plum pudding;
 - d) snow.

What makes a good pianist

When I was a kid, my family could only afford to send one child to private piano lessons – it was expensive – and my older sister got to be the one to go. It seemed like she was going to get some privilege that I was not going to get, so I threw a temper tantrum for several days. I was four years old. Finally my Dad said, "OK, OK, OK just be quiet, you can go." And after the second lesson I wanted to quit, because I didn't know you were supposed to come home every day and practice. So I said, "Thanks, Dad, but now I don't want to do it," and he said, "Oh no, no, no, it doesn't go that way." So from four years old until about 11 years old, playing the piano was not fun. I mean, there were other things that I thought I should be doing.

At 11 years old I started studying at the musical college which is now the musical college of Roosevelt University. That's when things changed. I started hearing things within the music then and started see-

ing things between the notes. I got to the point where instead of my parents saying, "You'd better go in there and practice," they would say, "Gee, it's 11 o'clock, don't you want to stop practicing now?" The tables had turned. I could just sit at the piano for hours. I loved the *sound* of it, the *feel* of it.

1. Who was first sent to private piano lessons?
 - a) the boy;
 - b) the boy's father;
 - c) the boy's sister;
 - d) some other child.

2. The boy threw a temper tantrum – behaved nastily – because:
 - a) he wanted to get the privilege his sister got;
 - b) he liked music and wanted to practice;
 - c) piano lessons were fun and he did not want to miss it;
 - d) he wanted to go to the musical college.

3. The boy wanted to quit because:
 - a) his father could not afford the lessons;
 - b) his father wanted to live quietly;
 - c) he did not like the sound of the piano;
 - d) he hated everyday practice.

4. How long were piano lessons not fun for the boy?
 - a) 4 years;
 - b) 7 years;
 - c) 15 years;
 - d) 11 years.

5. Which statement is not true? At the age of 11:
 - a) the boy came to understand music;
 - b) the boy loved the sound of the piano;
 - c) the boy liked to practice for hours;
 - d) the boy liked to turn the tables.

A way to success

In the United States young actors usually go to Hollywood because most of the movies are made there. I didn't go to Hollywood – it was my home, my family moved from New York to California before I was born. There are beautiful houses in Hollywood, but it isn't all beautiful. My mother and I lived in a bad street where drugs and criminals were no surprise. My father moved away from home shortly after my birth but he often visited us and I was happy. I was not always a good boy, school didn't interest me much - I liked playing and having fun. My first time on TV was at five but since I always wanted to play the show's producers got angry with me and I had to wait for about nine years before my next chance. But TV wasn't the only interesting thing, there remained books and movies, animals and the ocean.

Of course, I wanted to act, but many other people also did. In Hollywood actors usually audition for a part and directors watch and choose the right people. I went to a lot of auditions to get a job. First I got only small parts in TV commercials, more important parts weren't easy to get. Once a producer didn't like my name, I tried a new one but it wasn't a success either so I went back to the old. Then fortune smiled at me and I got a big part in *Santa Bambama* which was on TV five times every week with a new script for every show.

1. The boy was born in:

- a) New York;
- b) Hollywood;
- c) Santa Barbara;
- d) California.

2. The boy got his first big part when he was:

- a) five;
- b) ten;
- c) nine;
- d) fourteen.

3. The producers didn't think he was the right child for the TV show because:

- a) his father moved away *from home*;
- c) he lived in a bad street;
- b) TV wasn't the only interesting thing;
- d) he always wanted to play.

4. The boy got only small parts because:

- a) he auditioned but wasn't a success;
- b) a producer didn't like his *name*;
- c) there were lots of other actors to *compete* with;
- d) more important parts were not easy for *him*.

5. Which statement is true?

- a) The boy didn't go to Hollywood because his family moved *from* California.
- b) Apart *from* their job on TV actors usually audition in Hollywood.
- c) The boy liked watching movies and reading.
- d) The boy played his first big part five *times*.

Scotland

In area Scotland is more than half as big as England. Its population is, however, only one – eighth as great. Scotland was an independent kingdom, often at war with England, until 1603. It had never been entirely conquered by the Romans, who advanced some distance into Scottish territory, but for the most of their four centuries in Britain remained mainly behind the great wall which they built in the reign of the Emperor Hadrian, to the south of the modern boundary. In 1603 King James VI of Scotland became King James I of England too, and from then onwards the countries were under the same monarch, though the Act of Union was not passed until 1707. This Act incorporated Scotland with England in the United Kingdom, but the Scots kept their own legal system, religion and administration and still keep them now. Thus Scotland has never been united with England in the same way as Wales.

On the whole Scottish national consciousness is cultural and sentimental, and not much concerned with language. The Gaelic language, a Celtic tongue, is still used rather than English among the people of some remote Highland districts, but elsewhere most of the people are not of Celtic origin and would have no possible reason for wanting to introduce the Gaelic which would be an entirely foreign tongue. The English language is spoken all over Scotland with a variety of regional accents, but all of these can be at once recognized as Scottish, with the vowels and consonants pronounced more nearly as written than in standard English or any of the regional accents of England.

1. What is true about Scotland?

- a) It is as big as England;
- b) The Romans conquered it;
- c) It was independent until 1603;
- d) In 1707 its king became the king of England too.

2. Who was James I?

- a) the king of Scotland;
- b) the king of England;
- c) the king of Scotland and England;
- d) the king of the United Kingdom.

3. What rights did Scotland not keep after 1707? The Scots did not keep their own:

- a) legal system;
- b) religion;
- c) monarch;
- d) administration.

4. What language is spoken all over Scotland?

- a) English;
- b) Scottish;
- c) Celtic;
- d) Gaelic.

Exploration for oil

Exploration for oil around the Scottish shores has become a very big industry. This is an account of how oil is extracted from beneath the North Sea.

To get the oil out, four production platforms will be used: huge structures, three made of concrete and one of steel, designed to work for 25 years or more. Instead of floating, they are planted firmly on the sea bed and designed to stand up to the worst of sea and weather. From each platform a series of holes is drilled, some going almost straight down, others drilled at an angle away from the platform so that a large volume of oil can be extracted. The oil does not lie there like a great swimming pool full of black liquid, it is trapped in small spaces between the porous rocks. To get as much as possible out many separate holes have to be drilled.

Each platform has accommodation for 90 people. The life is tough, the work heavy and difficult, and the hours long. No alcohol is allowed on the platforms but the food is good and there is plenty of it, a necessity for men who work hard all day in cold wet conditions. The living quarters are comfortable, but far from luxurious, and the noise is continuous.

1. What constructions are used to extract oil?
 - a) 4 floating production platforms;
 - b) 3 floating and 1 stable platforms;
 - c) 4 concrete stable platforms;
 - d) 4 stable production platforms;

2. Where is oil?
 - a) by the sea, on the coast;
 - b) floating on the sea surface;
 - c) trapped between the rocks in the sea;
 - d) lying under water like a swimming pool.

3. To get much oil it is necessary to:
 - a) drill one deep hole;

- b) drill a series of holes;
- c) drill many holes going straight down;
- d) drill a hole at an angle from the platform.

4. What is not true about the life of oilmen?

- a) Working hours are long;
- b) Living quarters are luxurious;
- c) The noise is constant;
- d) There is much good food.

Lost dogs

The moot question as to whether lost dogs have the mysterious power of being able to get back home from distant places has been argued for years by dog owners, dog haters, and other persons who really do not know much about the matter. Professor Evans flatly sides with the latter, with those who believe that the lost dog doesn't have any more idea where he is than a baby in the woods. "Like pigeons", he writes, "dogs are thought to have a supernatural ability to find their way home across hundreds, even thousands, of miles of strange terrain. The newspapers are full of stories of dogs who have miraculously turned up at the doorsteps of baffled masters who had abandoned them afar. Against these stories, however, can be set the lost and found columns of the same papers, which in almost every issue carry offers of rewards for the recovery of dogs that, apparently, couldn't find their way back from the next block."

If this reasoning were applied to the thousands of men who disappear from their homes every year, it would be too easy an explanation for man or beast. Prince, the dog, has just as many reasons for getting and staying out as George, the husband: an attractive female, many companions, change of routine, words of praise, small attentions, new horizons, an easing of discipline. The dog that does not come home as well as the one that does is a large field of research for the inquisitive mind, and skepticism in such matters is scarcely a method of investigation.

-
1. Who does not question the mysterious powers of lost dogs?
 - a) a dog owner;
 - b) a dog hater;
 - c) a cat owner;
 - d) a scientist.

 2. Who has no ability to get back home from distant places?
 - a) dogs;
 - b) bees;
 - c) pigeons;
 - d) babies.

 3. In his writings professor Evans expresses a point of view of:
 - a) dog owners;
 - b) dog haters;
 - c) skeptics who don't know much about the matter;
 - d) researchers with inquisitive minds.

 4. Advertisements about lost dogs cannot be found:
 - a) in scientific papers;
 - b) in the magazines;
 - c) in the newspapers;
 - d) on the lamp posts.

 5. What reasons could dogs have for not returning home?
 - a) many companions;
 - b) easing of discipline;
 - c) an attractive female;
 - d) attachment to their masters.

 6. Which statement is not true?
 - a) Lost dogs can find their way across hundreds of miles of unknown terrain.
 - b) No dog can find the way home from the next block.
 - c) Dogs do not return home because they are inquisitive.
 - d) Dogs can cross rivers they meet on their way.

Should minks be free?

One night a do-goody organization formed for the protection of animals broke into a mink-farm in Britain. The minks were not consulted, of course, *but* the animal lovers knew that minks had been born free and decided that their sufferings in captivity should be intolerable. So several hundred minks disappeared in no time in the neighboring woods. This caused the greatest possible alarm. Not that the minks behaved badly. Not in the least. *But* their reputation proved to be *truly* awesome. According to another animal loving society, minks were said to be some of the most dangerous of all animals. In fact, they belong to the ferret family, the wildest and most vicious of creatures. Taking the ferret's weight and size into consideration, the minks appeared to be more dangerous than tigers. The ferret – and the mink – does not only kill the *unfortunate* otter, which is dying *out* in any case, *but* might attack and kill *children*.

Thus the blow *struck* for the Freedom of the Mink created wild panic among British mothers. Then an unexpected twist *occurred*. The minks failed to attack children in the neighborhood. A few hours after their release, when their morning feeding time approached, the little beasts obediently returned to the farm and queued for a renewed term of captivity. Their decision was only too obvious: they preferred good room service, proper heating and sufficient and tasty food to the dangers and other inconveniences of the woods, to the risks of hunting and being *hunted*. In other words, they preferred comfort to freedom. Minks are only *human*.

Freedom means responsibility: equally shirked by man and ferret. Wearing a mink coat seems to have a demoralizing effect on both.

1. Taking into consideration weight and size parameters, the most dangerous animal is:

- a) a ferret;
- b) a mink;
- c) an otter;
- d) a tiger.

2. The animal lovers' act failed because:
 - a) the minks got *used* to living in captivity;
 - b) the minks failed to attack children;
 - c) the minks were not consulted;
 - d) the minks proved their reputation.

3. Which does not follow from the text? The minks seemed to like:
 - a) good room service;
 - b) central heating;
 - c) proper diet;
 - d) regular feeding.

4. In the author's opinion, minks are:
 - a) wild and intolerable;
 - b) vicious and dangerous;
 - c) demoralized and suffering;
 - d) only *human*.

5. Which statement is *true*?
 - a) The minks were *truly* awesome and behaved badly.
 - b) The minks preferred the risks of hunting and being *hunted*.
 - c) The minks created wild panic among British mothers.
 - d) The minks' sufferings in captivity were intolerable.

Easter

The build-up to Easter begins on Shrove Tuesday. This is the day before Ash Wednesday – the beginning of the 40 days Lent. On Shrove Tuesday it is the custom to cook and eat pancakes. This is symbolic of using left-over food – eggs, milk and flour in this case – in readiness for Lent, traditionally a time of fasting and abstinence. Nowadays very few British people actually fast at Lent, but many use it as a time to try to give up something they know is bad for them, such as chocolate, alcohol or cigarettes.

Although Easter is the most important festival in the Christian calendar, the majority of the British public pay much more attention to Christmas with its traditions of present giving, eating and drinking.

Good Friday (three days before Easter Day) and Easter Monday are bank holidays, and the banks and other financial institutions, offices and shops are closed on these days.

Gift giving is more restricted than at Christmas although most children are given an Easter egg – made of chocolate and often filled with sweets or a small gift. Tradition says that these eggs are delivered by Easter Bunny (rabbit) and it is a popular game for the children to hunt for small eggs concealed around the house or garden.

Fish is traditionally eaten on Good Friday and Easter cake is an iced fruit cake with a marzipan ring on the top.

1. When does Lent begin?
 - a) on Shrove Tuesday;
 - b) on Ash Wednesday;
 - c) on Good Friday;
 - d) on Easter Monday.

2. What is the best Easter present for children?
 - a) a chocolate egg;
 - b) a boiled egg;
 - c) a toy egg;
 - d) a scrambled egg.

3. Who do the children think delivers Easter presents?
 - a) Father Frost;
 - b) father and mother;
 - c) Easter Bunny;
 - d) a rabbit from a nearby forest.

4. What food is usually prepared on Shrove Tuesday?
 - a) pancakes;
 - b) eggs and milk;
 - c) an iced fruit cake;
 - d) fish.

5. How many days do Easter bank holidays last?
 - a) 40 days;

- b) 4 days;
- c) until Christmas;
- d) 1 day.

6. What do people usually do at Lent?

- a) pray and fast;
- b) eat meat and eggs;
- c) go for a 40 days holiday;
- d) eat much chocolate and drink profusely.

The shoes people wear

For centuries, shoes have shown a great deal about the wearer. In Ancient Rome, the type of sandals worn by the soldiers revealed their rank. During the reign of Louis XIV of France only red shoes could be used by the aristocracy at the King's court. In the Middle Ages in Europe sandals were presented to the Pope as a sign of support between the Church and the State.

Today's fashionable high heels are not a modern invention. High heels were first made in the Middle Ages. Streets were narrow and very dirty since people would throw their rubbish out into the streets. To overcome the problem of walking through the rubbish, people wore high heels or platform shoes, both soon becoming quite common.

In China high-ranking ladies would have their feet bound to make them as small as possible. Small feet were considered to be a sign of great beauty. From a very early age, young girls would have their feet bound up tightly. As young ladies they would squeeze their feet into shoes that were only three or four inches long.

Shoes are mentioned in folk stories, old customs and traditions. Long ago throwing an old shoe at someone was considered to be an ancient way of bringing someone good luck. After weddings guests would throw shoes at the bride and groom as they left their wedding. Later this was considered rather unclean so the old shoes were tied to carriages and later to cars instead. In Anglo-Saxon marriages, the bride's father delivered her shoe to the bridegroom who touched the bride's forehead with it to show he owned her.

Shoes also appear in many stories, fairy tales and songs. For Cinderella a small glass slipper led her to her Prince Charming, with a little help from her fairy godmother! In *The Wizard of Oz*, shoes carried Dorothy and her dog home along the Yellow Brick Road. And more recently, Elvis Presley sang about his *Blue Suede Shoes*.

1. According to the text, a person's rank could be revealed by:
 - a) the height of the shoes' heels;
 - b) the length of the feet;
 - c) the color of the shoes;
 - d) the thickness of the platform

2. Among common footwear the author failed to mention:
 - a) boots;
 - b) sandals;
 - c) slippers;
 - d) suede shoes.

3. What would fashionable ladies not do?
 - a) Wear shoes three or four inches long;
 - b) Squeeze their shoes to make them as small as possible;
 - c) Throw an old shoe at the bride and groom after the wedding;
 - d) Have their feet bound up tightly.

4. Which is not a custom of bringing someone good luck?
 - a) to throw an old shoe away;
 - b) to tie a shoe to wedding carriages;
 - c) to nail a horseshoe above the doorway;
 - d) to throw rice at the bride and groom.

5. Which statement is not true?
 - a) Platforms are not a modern invention.
 - b) In the past, people wore high heels of necessity rather than fashion.
 - c) In the past, shoes could be a gift of significance.
 - d) A common slipper led Cinderella to her Prince Charming.

Is Standard English necessary?

The other day in Glasgow I was driven to the airport by a talkative and inquisitive taxi driver, who wanted to know (I think) what I felt about the city's beauties, weather, crime-rate and so forth. The trouble was, I could understand only about one word in 10 of what he said. I perceived his questions more by the interrogative note in his voice than by an understanding of their nature. So I used my stock device in such situations: "Ah-ha, but what do you think?" – which served its turn.

People sneer at Standard English pronunciation as "elitist", but the fact is that the development of such a clear and strictly regulated method of speech has been an enormous aid to the primary purpose of the language: communication. A Cornishman can barely understand a Glaswegian at all but both find Standard English comprehensible. All nations evolve by a process of cultural conquest from a central core. England emerged from the "Home Counties" (that is, the non-foreign counties), those bordering on London, plus Hertfordshire and Sussex. The people of these areas spoke the East Mercian dialect, which became the basis of modern English. The process was slow, because it was a matter not only of pronunciation but of different verbal forms.

By the second half of the 16th century, however, the matter was well on the way to being resolved. A form of Standard English was emerging. It is true as has been observed that great lords coming to courts from their regions, "carried their counties with them on their tongues".

But it was beginning to be recognized that there was a "proper" or correct way to pronounce English. However, it is not quite clear when orthodox pronunciation, termed in the 19th century the "Oxford" accent, became mandatory for social purposes.

1. What could the taxi-driver possibly not ask about?
 - a) Standard English;
 - b) the weather;
 - c) Glasgow beauties;
 - d) the crime-rate in Glasgow.

2. How many words could the author understand?

- a) one word;
- b) no words at all;
- c) 10 words in a hundred;
- d) one word in a hundred.

3. How could the author understand when he was questioned?

- a) by understanding the nature of questions;
- b) with the help of other taxi-drivers;
- c) by asking the driver to repeat what he said;
- d) by the interrogative intonation of the driver's sentences.

4. Which countries are not "Home Counties"?

- a) Central;
- b) Hertfordshire;
- c) Cornwall;
- d) Sussex.

5. Which dialect became the basis of Standard English?

- a) Cornish;
- b) East Mercian;
- c) Scottish;
- d) Welsh.

6. The evolution of modern English was slow because of the problems of:

- a) pronunciation;
- b) communication;
- c) differences in verbal forms;
- d) political ambitions of the great lords of the counties.

7. When was the "Oxford" accent established?

- a) in the second half of the 16 century;
- b) in the 19 century;
- c) in the Middle Ages;
- d) quite recently.

Transport problems in London

To the transport planner, the problem posed by the private cars in city centers is simple. There are too many cars being used by too few people too often. The solution, however, is not so simple.

The problem faces every major city each day. Thus, in London, during the morning rush hour, between 8 and 10 a.m., *about* 94000 cars carrying approximately 100000 people *force* their way into the 6 square miles named the Central London Area – the very heart of the city.

A third of them drive straight through, seeking destinations on the other side of London. Of the rest, half wheel their way into private car parks and the rest nose around for the 32000 on-street and off-street public parking spaces.

Although the *journey* into the centre of London is *much* faster now than it was 15 years ago, it is *unlikely* to get any easier. For the *question* who comes first on the city's streets – the private driver or the fare-paying passenger – has become a major political and planning *issue*.

People entering Central London by public transport *outnumber* motorists by 10 to one. During the peak morning period, 3200 *buses*, each discharge an average of 46 passengers into Central London. Rail and *Tube* carry their share of the million or so travellers. Over the next 6 or 7 years by a stiff combination of measures the *Council* aims to *reduce* by a third the 94000 cars entering London. Proposals *include* taking control of private parking and *issuing* licences (at a fee) for spaces, removing almost half the existing parking meters, encouraging "park and ride" travellers and most controversially, *reintroducing* a modified scheme of supplementary licensing. Although this idea was abandoned two years ago as impractical, transport planners are nevertheless drawing *up* proposals for what is now described as an "area licensing scheme" which *would* allow only permit holders into central areas. Senior transport planners believe that parking restrictions have only a limited effect and that a supplementary licensing scheme is the last and only option.

1. Which of the following statements formulates the problem more exactly?

- a) Too few people *use* public transport.

- b) There are too few parking spaces.
- c) There are too many cars in London.
- d) The Central Area is too small.

2. When is the peak period?

- a) between 8 and 10 in the morning;
- b) between 8 and 10 in the evening;
- c) before 8 in the morning;
- d) after 10 in the morning.

3. How many car drivers *use* public parking spaces?

- a) a third;
- b) a half;
- c) a sixth
- d) two thirds.

4. Which of the following is not *true*?

- a) The *journey through* the centre to the other side is faster now than it was 15 years ago.
- b) 15 years ago, the *journey* to the centre was slower than it is now.
- c) The *journey* to the centre is easier now than it was 15 years ago.
- d) The *journey through* the centre is no easier now than it was 15 years ago.

5. In what proportion do the people entering Central London by public transport *outnumber* motorists?

- a) 1:10;
- b) 10:1;
- c) 46:32000;
- d) 46:10.

6. A private car driver can enter Central London area by:

- a) becoming a permit holder;
- b) paying an extra fee;
- c) very fast driving;
- d) taking a passenger with him.

The Moon

Long before the dawn of written history the Moon was paid much attention to by man who was interested and attracted by the presence in the sky of a planet so close to the Earth that the distance can be measured in thousands of kilometers, all the other figures being millions, billions and trillions. With the passage of time man began to note that the Moon went through several phases succeeding one another with perfect regularity. The earlier calendars offered were lunar calendars, each month beginning on a new moon. That influenced dividing the year into 12 months (in the calendar now in general use), their names being given by the Romans.

In the Middle Ages the Moon was supposed to have a smooth crystalline surface like a mirror and the dark spots were considered to be mere reflections of the Earth. However, as early as 1609, with the help of the first little telescope this conception was put an end to by Galileo who thought that he saw mountains and valleys, seas and continents on the Moon. Today the view of the Moon is obtained with the help of a series of automatic stations, but in spite of all man has learned from space flights, the Moon is still a riddle from the distant past - and will be for a long time to come.

One thing man has come to know for sure is that the Moon is not made of green cheese, – it consists of the same chemical elements as other celestial bodies in the solar system, their proportions varying from planet to planet. The Moon is almost devoid of carbon, so necessary for living things on the Earth, and the makeup of its atmosphere is quite different. But in some other ways it is more like the Earth than many scientists thought. Photos and panoramas reveal that the Moon's surface is uneven and rugged, with many hills and cavities like volcanic craters, some measuring several kilometers in diameter. Like the Earth, the Moon has layers, with a crust on the outside and a deep mantle below. It might also have a center core which includes molten rock. The lunar ground is assumed to be firm enough, though rocks from the Moon show that they were once melted. As to the Moon's origin, none of existing theories has been proved to be either right or wrong, the truth remains to be investigated.

1. The distance (in thousands of kilometers) between the Earth and the Moon is approximately:

- a) 384;
- b) 384 bn;
- c) 384000;
- d) 384 m.

2. Scientists of the past failed to notice:

- a) the existence of rocks;
- b) the presence of seas and continents;
- c) the lack of carbon;
- d) the regularly succeeding phases.

3. The author compares the moon with:

- a) green cheese;
- b) a little sun;
- c) a yellow melon.
- d) a cake-like structure.

4. The surface of the Moon is not:

- a) uneven and rugged;
- b) firm and rocky;
- c) hills and vast craters;
- d) the reflections of the Earth.

5. Photos of the Moon showed:

- a) dark spots;
- b) its smooth crystalline surface;
- c) like that of a volcanic crater;
- d) devoid of cavities.

6. It follows from the text that:

- a) Galileo discovered the first little telescope;
- b) the Moon is just like the Earth;
- c) the Romans were the first to offer calendars;
- d) there remain many *dark spots* to investigate.

What is the Giant's Causeway?

According to legend, the bad-tempered Irish giant Finn MacCool built a road across the waves to reach his enemy Finn Gall, who lived on Scotland's Isle of Staffa. MacCool gathered together a number of long, stone sticks and hammered them into the seabed next to one another. Before challenging Finn Gall to a duel, the Irish giant returned home to rest. Meanwhile, Finn Gall crossed to Ireland and was deceived into thinking that the sleeping giant was MacCool's baby son. Terrified at the possible size of the father, Finn Gall hurried home to Staffa, destroying the causeway as he went.

The stone columns of this Giant's Causeway, also known as Ireland's legendary Stepping Stones, are on the Northern coast, some 80 km northwest of Belfast, the country's capital. Many of the ancient columns lie broken on the beach, while others have been swallowed by the sea or buried in the ground. While few people take seriously the fanciful tale of the powerful giants, the regularity of the columns does lend to the illusion that they were manmade.

An anonymous investigator from the 1930s decided there were around 40,000 columns present – no one knows how the count was made and yet the figure has never seriously been questioned. Most of the columns stand no higher than 6 m, although some, such as the Giant's Organ (so named because of its resemblance to a church organ), reach some 12 m.

Each individual column, shaped into a regular polygon, measures between 38 cm and 50 cm across. Most are six-sided, while others may have four, five or as many as ten faces. When viewed from above, the causeway resembles a street with regular paving stones – the columns fit together so exactly that it is difficult to insert a knife blade between them.

Drawings and sketches made in the 18th century by the Dublin Society and Britain's Royal Society drew the attention of the scientific world to this remarkable phenomenon. The paintings by the Earl-Bishop of Derry, Frederick Hervey, in the late 18th century, brought the causeway to the attention of the public.

To the Romantic Movement, which flourished at the start of the 19th century, the Giant's Causeway was the living proof of all they be-

lieved in. One of the leaders of the Movement declared that the impressive series of stone columns was "the temple and altar of Nature, devised by her own skill, and executed with a symmetry and grace which Nature alone could accomplish".

1. According to legend, the giant:

- a) Finn MacCool created the illusion of a road across the sea.
- b) Finn Gall returned home to rest after reaching his enemy across the sea.
- c) Finn Gall crossed home to Ireland over the sea.
- d) Finn MacCool made his enemy return home by deception.

2. It follows from the text that:

- a) quite a few people take seriously the tale of the powerful giants;
- b) few people nowadays believe that the columns were manmade;
- c) the regularity of the columns proves the theory that they were manmade;
- d) the regularity of the columns is an illusion created by the giants.

3. Most columns:

- a) resemble ordinary stones seen from above.
- b) have less than 10 faces.
- c) exceed 12 m in height.
- d) resemble regular polygons.

4. The world's attention was brought to Stepping Stones:

- a) in 1930s;
- b) in the late 18th century;
- c) at the start of the 19th century;
- d) in the early 18th century.

5. Which statement is not true?

- a) The exact number of columns suggested in 1930s has been seriously doubted.
- b) The Romantics considered Stepping Stones one of the finest creations of nature.

- c) Viewed from above, Stepping Stones look like a pavement.
- d) The Giant's Causeway is on the north coast of Ireland, its capital being about 100 km to the south.

Skype, a peculiar island in Scotland

Skype is located off Scotland's northwest coast, some 184 km from Glasgow. The island measures 77 km in length and 38 km at its widest. The largest island in Scotland's Inner Hebrides, Skye covers an area of 740 sq. km, about half the size of the state of Rhode Island in the USA. Skye's landscape is dominated by the spectacular Black Cuillin Hills, which an English journalist H. V. Morton (1892–1979) described in his book *In Search of Scotland*. Imagine Wagner's "Ride of the Valkyries" frozen in stone and hung up like a colossal screen against the sky. It seems as if Nature when she hurled the Coolins up ... said: "I will make mountains which shall be the essence of all that can be terrible in mountains".

According to legend, the island, once flat, was inhabited by Cailleach Bhur, the goddess of winter. She had enslaved a beautiful girl, the sweetheart of spring, who appealed to the *sun* for help. In response, the angry *sun* hurled his burning spear at Cailleach Bhur as she rode across Skye. But he missed his mark and destroyed the landscape which broke into a range of hills – the Cuillins. Skye's inhabitants often tell this tale to explain the *curious* fact that these hills are rarely snow-covered, even in winter. When surrounding hills are covered with snow, the Black Cuillins stand dark against the sky.

There are twenty peaks in the Black Cuillins, 15 of them more than 914 m in height. The tallest, Sgur Alasdair, stands 1,009 m high. The peaks came into existence some 50 million years ago. The Red Cuillin Hills, some 16 km to the east are more rounded than the Black Cuillins. In the south of the island stands the *unusual* rock known as the Old Man of Storr. Both these formations had their beginnings 10,000 years ago.

Little of Skye's landscape can support the barley, oats and other crops grown elsewhere in Scotland. Areas of human settlement occur only rarely. Thousands of seabirds nest on the island's coast and shore. The puffin which nests on dangerous rocks, can catch small fish in great numbers. It is not *unusual* for a puffin to *return* to its nest with as many

as 14 fish in its *mouth*. Yet Skye's puffin population is far from growing *due* largely to the attacks of lesser black-backed *gulls* which rob the puffins of their catch before they can reach their nests to feed their *young*.

1. Which of the following is *true*?

- a) Skye is located on Scotland's northwest coast.
- b) Skye is the largest plain in Scotland.
- c) Skye, the largest island in Inner Hebrides, dominates over Scotland.
- d) The state of Rhode Island is about twice as big as Skye.

2. According to legend:

- a) the *sun* got angry with a beautiful girl who had become the sweetheart of spring;
- b) the goddess of winter was enslaved by the *sun*;
- c) Cailleach Bhur terribly missed the *sun*;
- d) the angry *sun* made the Black Cuillins almost never snow covered.

3. What is not typical of Skye?

- a) The average height of the mountains is about 1000 m.
- b) The peaks are *quite* old, dating back millions years.
- c) There are many areas of human settlement there.
- d) Local people grow mostly barley and oats.

4. It follows from the text that Black Cuillins *could* hardly be described as:

- a) terrifying;
- c) dark and gloomy;
- b) inviting and inspiring;
- d) a screen against the sky.

5. The author states that it is *usual* for a puffin:

- a) to eat about 14 small fish at once;
- b) not to return to its nest;
- c) to catch *quite a number* of small fish.
- d) to be caught by black-backed gulls.

Canada

Canada is a constitutional monarchy with a parliamentary system of government modeled after that of Great Britain. The official head of state in Canada is Queen Elizabeth II of Britain, who is also Queen of Canada. The governor-general is the queen's personal representative in Canada and the official head of the Canadian parliament, although with very limited powers.

The federal parliament in Canada consists of the House of Commons and the Senate. The actual head of government is the prime minister, who is responsible for choosing a cabinet. The system is referred to as responsible government, which means that cabinet members sit in the parliament and are directly responsible to *it*, holding power only as long as a majority of the House of Commons shows confidence by voting with them.

The Canadian Senate has 102 members, appointed by the governor-general on the advice of the prime minister. Their actual function is advisory, although they may make minor changes in bills. The actual power resides in the House of Commons, the members of which are elected directly by the voters. General elections must be held at the end of every five years, but they may be *conducted* whenever issues require it, and most parliaments are *dissolved* before the end of the five-year term. When a government loses its majority support in a general election, a change of government occurs.

1. What does this passage mainly discuss?
 - a) The relationship between Canada and England;
 - b) The Canadian election process;
 - c) The Canadian system of government;
 - d) The powers of parliament.

2. When does a change of government occur in Canada?
 - a) When the governor-general decides to appoint a new government.
 - b) When the voters do not return majority support for the government in a general election.

c) When the prime minister advises the governor-general to appoint a new government.

d) When the House of Commons votes for a new government.

3. The underlined word "dissolved" could best be replaced by:

a) approved;

b) evaluated;

c) reorganized;

d) dismissed.

4. The underlined word "conducted" is closest in meaning to:

a) elected;

b) held;

c) dissolved;

d) loses.

5. The underlined word "it" refers to:

a) parliament;

b) voting;

c) government;

d) majority.

6. Select the sentence that indicates whose responsibility it is to choose the cabinet in Canada:

a) The actual power resides in the House of Commons, the members of which are elected directly by the voters;

b) The federal parliament in Canada consists of the House of Commons and the Senate;

c) The system is referred to as responsible government;

d) The actual head of government is the prime minister, who is responsible for choosing a cabinet.

7. What does the author mean by the following statement? Canada is a constitutional monarchy with a parliamentary system of government modeled after that of Great Britain:

a) Whereas Canada has a constitutional form of government. Great Britain has a parliamentary system.

- b) Canada and Great Britain both have model systems of government.
- c) Great Britain and Canada have very similar systems of government.
- d) Canada's parliament has adopted Great Britain's constitution.
8. The governor-general is described as all of the following, except for:
- a) the official head of parliament;
- b) the head of government;
- c) the queen's representative in Canada;
- d) the official who appoints the senate.
9. It can be inferred from the passage that the voters in Canada:
- a) choose the prime minister and the Cabinet;
- b) do not usually vote in general elections;
- c) allow their representatives in the House of Commons to vote on their behalf in general elections;
- d) determine when a change of government should occur.

Graying America

Persons sixty-five years and over already represent 13 percent of the total population in America, and by 2025 there will be 59 million elderly Americans, representing 21 percent of the population of the United States. Furthermore, the percentage of the population over age eighty-five will increase from about 1 percent currently to 5 percent in 2050. This population trend has been referred to as the graying of America.

To explain this demographic change, we must look to three factors. Fertility, mortality, and immigration in large part influence all demographic trends. The large number of children born after World War II will increase the *pool* of elderly between 2010 and 2030. The "baby boom" will have become the "senior boom" sixty-five years later.

Although the *increase* in the birth rate is the most dramatic factor, the decline in the death rate is also significant. Medical advances have influenced life expectancy. For example, whereas only 40 percent of

those Americans born in 1900 had a life expectancy of sixty-five, today 80 percent are expected to reach the classic retirement age. The average male life span, now 71.4 years, is expected to increase to 73.3 by 2005. Among females, the life span is projected to increase from the current 78.3 years to 81.3 years by 2005.

In addition, immigration has contributed to the increasing number of elderly. After World War I, a massive immigration of young adults of child-bearing age occurred. Because the birth rates among this specialized population were very high, *their* children, now among the elderly, are a significant segment of the older population.

1. Which of the following would be the best title for the passage?

- a) The Graying of America;
- b) Immigration Patterns in America;
- c) Trends in Life Expectancy;
- d) Baby Boomers.

2. The average life expectancy for an American woman today is:

- a) 71.4 years;
- b) 73.3 years;
- c) 78.3 years;
- d) 81.3 years.

3. The underlined word "pool" refers to:

- a) a group of people;
- b) a general direction;
- c) a negative attitude;
- d) an increase in influence.

4. The underlined word "increase" is opposite in meaning to:

- a) decline;
- b) life expectancy;
- c) medical advances;
- d) retirement age.

5. The underlined word "their" refers to:

- a) the birth rates;

- b) young adults;
- c) this specialized population;
- d) the elderly.

6. Choose the paragraph that explains what has influenced life expectancy:

- a) Although the increase in the birth rate is the most dramatic factor ...
- b) To explain this demographic change, we must look to three ...
- c) Persons sixty-five years and over already represent 13 percent of the total population in America ...
- d) In addition, immigration has contributed to the increasing number of elderly ...

7. What does the author mean by the following statement? Although the birth rate is the most dramatic factor, the decline in the death rate is also significant:

- a) Both the increase in births and the decrease in deaths are significant.
- b) The higher number of births is less significant than the decrease in deaths.
- c) Lower birth rates and higher death rates have had dramatic results.
- d) A significant change in the number of births has balanced the change in the death rates.

8. The author mentions all of the following as factors that have influenced population trends, except for

- a) the "baby boom" after World War II;
- b) the immigration after World War 1;
- c) the improvements in health care;
- d) the decline in the birth rate among young Americans.

9. It can be inferred from the passage that the word "gray" is a reference to:

- a) the hair color typical of older people;

- b) the last name of the person who has studied the population trends;
- c) the diversity of colors in the population that mix to make gray;
- d) the dismal outlook for the future because of population trends.

Prisons in the USA

In the United States today there are more than half a million criminals serving time in prison. Most prisoners are male high-school dropouts between the ages of 18 and 29. Even more shocking is the fact that the number and rate of imprisonment has more than doubled over the past twenty years, and the *recidivism* – that is, the rate for rearrest – is more than 60 percent.

Although the stated objective of most prison systems, on both federal and state levels, is to rehabilitate the inmates and reintegrate *them* into society, the systems themselves do not support such a *goal*. Prisons are usually geographically or psychologically isolated and terribly overcrowded. Even in the more enlightened prisons, only one-third of the inmates have vocational training opportunities or work release options.

If prisons are indeed to achieve the goal of rehabilitating offenders, then the prisons themselves will have to change. First, they will have to be smaller, housing no more than five hundred prisoners. Second, they will have to be built in or near population centers with community resources available for gradual reintegration into society. Finally, prison programs must be restructured to include work release and vocational and academic training that promises to carry over into the inmate's life after release. Models for such collaborative efforts between the criminal justice system and the community already exist in several hundred half-way houses throughout the country.

1. What is the author's main point?
 - a) Prisons must be restructured if they are to accomplish the goal of rehabilitation.
 - b) Models for community collaboration have been successful.
 - c) Most of the criminals serving time in prison are high-school dropouts.
 - d) The criminal justice system must establish a better goal.

2. According to the author, how many prisoners are offered training or work release?

- a) None;
- b) 33 percent;
- c) 50 percent;
- d) 60 percent.

3. The underlined word "recidivism" refers to:

- a) all people who are imprisoned;
- b) people who return to prison after release;
- c) people who drop out of high school;
- d) people who have been in prison for a long time.

4. The underlined word "goal" is closest in meaning to:

- a) society;
- b) prisons;
- c) the stated objective;
- d) federal and state levels.

5. The underlined word "them" refers to:

- a) inmates;
- b) criminals;
- c) federal and state levels;
- d) prison systems.

6. Choose the sentence that explains the rate of imprisonment over the past twenty years:

a) Even more shocking is the fact that the number and rate of imprisonment has more than doubled over the past twenty years, and the recidivism—that is, the rate for rearrest — is more than 60 percent.

b) In the United States today there are more than half a million criminals serving time in prison.

c) Most prisoners are male high-school dropouts between the ages of 18 and 29.

d) Prisons are usually geographically or psychologically isolated and terribly overcrowded.

7. What does the author mean by the statement? Although the stated objective of most prison systems, on both federal and state levels, is to rehabilitate the inmates and reintegrate them into society, the systems themselves do not support such a goal:

a) Inmates in prisons do not participate in rehabilitation programs before they are reintegrated into society.

b) The goal of rehabilitation and reintegration into society is encouraged by the prison systems.

c) Prison systems do not promote rehabilitation and reintegration despite their goal.

d) Rehabilitation cannot be achieved by prisons without reintegration into society.

8. The author mentions all the following as necessary to prison reform, except for:

a) newer buildings;

b) smaller institutions;

c) vocational training

d) collaboration with the community

9. The paragraph following this passage most probably discusses:

a) the goals of most state and federal prisons;

b) the cost of prison reform;

c) examples of models for community collaboration;

d) problems with the current criminal justice system.

Eugene O'Neil

Universally acclaimed as America's greatest playwright, Eugene O'Neill was born in 1888 in the heart of the theater district in New York City. As the son of an actor he had early exposure to the world of the theater. He attended Princeton University *briefly* in 1906, but returned to New York to work in a variety of jobs before joining the crew of a freighter as a seaman. Upon returning from voyages to South Africa and South America, he was hospitalized for six months to recuperate from tuberculosis. While he was recovering, he determined to write a play about his adventures on the sea.

He went to Harvard, where he wrote the one-act "Bound East for Cardiff". It was produced on Cape Cod by the Provincetown Players, an experimental theater group that was later to settle in the famous Greenwich Village theater district in New York City. The Players produced several more of his one-acts in the years between 1916–1920. With the full-length play "Beyond the Horizon", produced on Broadway in 1920, O'Neill's success was assured. The play won the Pulitzer prize for the best play of the year. O'Neill was to be awarded the prize again in 1922, 1928, and 1957 for "Anna Christie", "Strange Interlude", and "Long Day's Journey Into Night". In 1936, he was awarded the Nobel prize for literature.

O'Neill's plays, forty-five in all, cover a wide range of dramatic subjects, but several themes emerge, including the ambivalence of family relationships, the *struggle* between the sexes, the conflict between spiritual and material desires, and the vision of modern man as a victim of uncontrollable circumstances. Most of O'Neill's characters are seeking meaning in their lives. According to his biographers, most of the characters were portraits of himself and his family. In a sense, his work chronicled his life.

1. This passage is a summary of O'Neill's:
 - a) work;
 - b) life;
 - c) work and life;
 - d) family.

2. How many times was O'Neill awarded the Pulitzer prize?
 - a) one;
 - b) three;
 - c) four;
 - d) five.

3. The underlined word "briefly" is closest in meaning to:
 - a) seriously;
 - b) for a short time;
 - c) on scholarship;
 - d) without enthusiasm.

4. The underlined word "struggle" is closest in meaning to:

- a) ambivalence;
- b) emerge;
- c) conflict;
- d) vision.

5. The underlined word "it" refers to:

- a) Cape Cod;
- b) the one-act "Bound East for Cardiff";
- c) the Provincetown Players;
- d) the famous Greenwich Village theater.

6. Choose the sentence that indicates the reason for O'Neill's hospitalization:

- a) He had a sore throat.
- b) He was hospitalized to recuperate from tuberculosis.
- c) He wanted to get a sick leave.
- d) He caught a cold.

7. What does the author mean by the following statement? According to his biographers, most of the characters were portraits of himself and his family:

- a) He used his family and his own experiences in his plays.
- b) His biography contained stories about him and his family.
- c) He had paintings of himself and members of his family.
- d) His biographers took pictures of him with his family.

8. The author mentions all of the following as themes for O'Neill's plays, except for:

- a) life in college;
- b) adventures at sea;
- c) family life;
- d) relationships between men and women.

9. We can infer from information in the passage that O'Neill's plays were not:

- a) controversial;

- b) autobiographical;
- c) optimistic;
- d) popular.

Edgar Allan Poe

Edgar Allan Poe is today regarded as one of the premier authors of horror stories, but he received very little *recognition* and almost no money for his stories while he lived. Twenty-five of his greatest stories were published in a collection called "Tales of the Grotesque and Arabesque", which appeared in 1840, but at the time little notice was taken of it. Three years later, another story, "The Gold Bug", was published, selling 300,000 copies, and by 1845 he had written twelve more stories, which he published in "Tales". His best-known stories include "The Pit and the Pendulum" and "The Tell-Tale Heart", but *it* was a poem, "The Raven", that brought him his greatest recognition as a writer.

The centerpiece of a collection of thirty poems published in a volume titled "The Raven and Other Poems", it became quite popular. The theme of the poem is grief over the loss of an ideal love. The dramatic, almost theatrical tone, the intensity of the repetition, and the hypnotic rhythm reflect the narrator's despondent and *desperate* state of mind. When read aloud, it produces a powerful effect.

1. What is the author's main purpose in this passage?
 - a) To give examples of horror stories.
 - b) To chronicle the work of Edgar Allan Poe.
 - c) To compare Poe's stories with his poems.
 - d) To suggest that "The Raven" be read aloud.

2. According to the passage, which of the following tales sold 300,000 copies?
 - a) The Tell-Tale Heart;
 - c) The Raven;
 - b) The Gold Bug;
 - d) The Pit and the Pendulum.

3. The underlined word "recognition" is closest in meaning to:

- a) criticism;
- b) opportunities;
- c) imitation;
- d) appreciation.

4. The underlined word "desperate" is closest in meaning to:

- a) despondent;
- b) dramatic;
- c) theatrical;
- d) hypnotic.

5. The underlined word "it" refers to:

- a) the Tell-Tale Heart;
- b) the Raven;
- c) the Pit and the Pendulum;
- d) another story.

6. Choose the sentence that identifies the theme of the poem "The Raven":

- a) The centerpiece of a collection of thirty poems published in a volume titled "The Raven and Other Poems", it became quite popular.
- b) The theme of the poem is grief over the loss of an ideal love.
- c) The dramatic, almost theatrical tone, the intensity of the repetition, and the hypnotic rhythm reflect the narrator's despondent and desperate state of mind.
- d) When read aloud, it produces a powerful effect.

7. What does the author mean by the following statement? His best-known stories include "The Pit and the Pendulum" and "The Tell-Tale Heart", but it was a poem, "The Raven", that brought him his greatest recognition as a writer:

- a) Poe is remembered more for a poem than for his short stories.
- b) The Raven" is less well-known than Poe's short stories.
- c) Poe is famous for both short stories and poetry.
- d) Poe wrote more short stories than poems.

8. The author mentions all of the following as features of "The Raven", except for:

- a) intense repetition;
- c) cheerful mood;
- b) dramatic tone;
- d) hypnotic rhythm.

9. It can be inferred from the passage that Edgar Allan Poe:

- a) was married at a young age;
- b) lived in poverty;
- c) suffered a mental breakdown;
- d) died young.

Jazz

Jazz originated in the southern United States after the Civil War. It began as the musical expression of black people who had formerly been slaves, combining hymns, spirituals, and traditional work songs into a new form. The style was a *blend* of the rhythms brought to America by the Africans who were imported as slave labor and the popular music of the era that featured the ragtime piano. The term jazz itself is of obscure, and possibly nonmusical origin, but it was first used to describe this particular kind of musical expression in about 1915.

Improvisation has always been one of the primary elements of jazz. While one instrument, often the trumpet, plays the melody, another instrument, usually the clarinet, *embellishes* and invents compatible melodies around the original theme. Such improvisation is a test of the jazz musician's skill.

A jazz band *commonly* includes four to twelve musicians with a relatively large proportion of the group in the rhythm section. Customarily, there are a drummer, a bass player, and a pianist. Often there is also a banjo player or guitarist. In traditional jazz, the clarinet, trumpet, and trombone carry the melody, but in more modern jazz, the saxophone, violin, and flute may also be included in the melody section. Some jazz bands employ a blues singer.

Jazz first became popular outside the South in the 1920s, when jazz bands began to record, distribute, and even export their recordings

to Europe. Since jazz is improvisational, it does not exist in the form of printed scores, and recorded performances were and still are the best way of preserving the music. A very basic library of recorded jazz would include work by such classic artists as Jelly Roll Morton, Louis Armstrong, Duke Ellington, Count Basie, and Billie Holiday. Theirs is probably America's most unique and most important contribution to the musical world, although there are a few contemporary artists who are keeping the tradition alive.

1. Which of the following is the main topic of the passage?
 - a) The history of jazz;
 - b) Jazz musicians;
 - c) Improvisation;
 - d) Jazz bands.

2. The new music of jazz was first heard:
 - a) in Europe;
 - b) in Africa;
 - c) in South America;
 - d) in North America.

3. The underlined word "blend" is closest in meaning to:
 - a) mixture;
 - b) rejection;
 - c) imitation;
 - d) variety.

4. The underlined word "commonly" is closest in meaning to:
 - a) customarily;
 - b) large;
 - c) relatively;
 - d) always.

5. The underlined word "embellishes" means:
 - a) plays in unison;
 - b) makes the melody more beautiful and complex;
 - c) keeps silent;
 - d) keeps playing.

6. Choose the paragraph that indicates the background of the people who first created jazz:

- a) Jazz first became popular outside the South in the 1920s;
- b) A jazz band commonly includes four to twelve musicians with a relatively large proportion of the group in the rhythm section;
- c) Jazz originated in the southern United States after the Civil War;
- d) Improvisation has always been one of the primary elements of jazz.

7. What does the author mean by the following statement? Since jazz is improvisational, it does not exist in the form of printed scores, and recorded performances were and still are the best way of preserving the music:

- a) Because jazz is not written down, it has not been preserved;
- b) Today jazz has written scores like other forms of music;
- c) Jazz is preserved in audio recordings instead of in written records;
- d) There are not very many copies of the early jazz performances.

8. The author mentions all of the following as characteristic of jazz, except for:

- a) a large number of percussion instruments;
- b) a printed score for the music;
- c) a melody played by the trumpet;
- d) a ragtime piano.

9. The paragraph following the passage most probably discusses:

- a) recorded performances by jazz musicians;
- b) modern jazz musicians;
- c) famous blues singers;
- d) Louis Armstrong's contribution to jazz.

Alfred Hitchcock

Alfred Hitchcock's precut scripts are legendary. More than any other director, Hitchcock insisted on working from precise and detailed

plans. He often used storyboarding, a series of framed drawings of his shots, especially for those sequences that would later require complex editing. Some of the scripts from which he worked included as many as six hundred sketches. Every camera shot was considered, and nothing extraneous was included.

By the time he had finished such a *detailed* plan, Hitchcock knew the script so well that he rarely had to refer to *it*. He then assumed his favorite role, and one that he compared to that of a conductor directing an orchestra without the score. It was at this point that his intuition served as his guide.

Because of the widespread popularity of suspense films, Hitchcock was always trying to avoid clichés by inventing new ways to present a similar plot. He was successful in part because he varied the mood from one film to another, and even introduced variation in the middle of a scene within the same film.

Hitchcock admitted that he was less interested in the story itself than in the telling of it. He was a master at using and creating techniques that infused the scene with strong emotions. Some of his most effective sequences are both terrifying and funny, providing the viewer with a *juxtaposition* of contradictory sensations.

1. What is the author's main purpose in the passage?
 - a) to describe Hitchcock's directing style;
 - b) to explain how Hitchcock used story-boarding;
 - c) to criticize Hitchcock's work;
 - d) to compare Hitchcock with an orchestra conductor.

2. What is storyboarding?
 - a) detailed script of the story;
 - b) an acting technique that requires using strong emotions;
 - c) an effect produced by editing film;
 - d) a sequence of drawings for the camera crew.

3. The underlined word "juxtaposition" is closest in meaning to:
 - a) new idea;
 - b) close placement;

- c) large number;
- d) difficult plan.

4. The underlined word "detailed" is closest in meaning to:

- a) framed;
- b) complex;
- c) extraneous;
- d) rarely.

5. The underlined word "it" refers to:

- a) camera shot;
- b) orchestra;
- c) time;
- d) script;

6. Choose the paragraph that discusses the variations in mood among Hitchcock's movies:

- a) Alfred Hitchcock's precut scripts are legendary;
- b) By the time he had finished such a detailed plan, Hitchcock knew the script;
- c) Because of the widespread popularity of suspense films, Hitchcock was always trying to avoid clichés;
- d) Hitchcock admitted that he was less interested in the story itself than in the telling of it.

7. What does the author mean by the following statement? Hitchcock admitted that he was less interested in the story itself than in the telling of it:

- a) The presentation of the story was more interesting to Hitchcock.
- b) Hitchcock had little interest in a story after he had told it.
- c) Hitchcock liked to find interesting stories to tell.
- d) The stories that Hitchcock told were usually very interesting.

8. Hitchcock's directing style is described as employing all of the following, except for:

- a) focusing his attention on the story line;
- b) using many drawings of camera shots;

- c) seldom referring to the script while shooting a scene;
- d) relying on intuition while filming.

9. The paragraph following the passage most probably discusses:

- a) other directors of suspense films;
- b) examples of scenes in Hitchcock films that elicited contradictory emotions;
- c) the reason for Hitchcock's success;
- d) the importance of the story line to the suspense film.

Independence Day

Independence Day in the United States is observed every year on the Fourth of July. Today, for most communities throughout the nation, the traditional celebration includes parades down the main streets, picnics with hot dogs and lemonade, and, of course, a fireworks display at night. In some towns across the country, however, special events are planned in honor of the *annual* occasion. In Bristol, Rhode Island, *fire engine teams* from communities throughout New England compete in a contest to squirt water from their fire hoses. Flagstaff, Arizona, hosts a *huge* three-day powwow, including a rodeo, for twenty Native American tribes. The annual Eskimo games with traditional kayak races are held in Kotzebue, Alaska. Two auto races are always scheduled for the Fourth, including a four-hundred-mile stock car event at the Daytona International Speedway in Daytona, Florida, and an annual auto race up the fourteen-thousand-foot precipice at Pike's Peak in Colorado.

Several small towns celebrate in other unique ways. Hannibal, Missouri, the hometown of Mark Twain, invites the children to participate in a fence-painting contest, reenacting a scene from Twain's novel "Tom Sawyer." Lititz, Pennsylvania, congregates in the Lititz Springs Park to light thousands of candles and arrange them in various shapes and images.

In Ontario, California, the townspeople combine the traditional with the unusual by setting up tables along Euclid Avenue for what they describe as "the biggest picnic table in the world." In this way, everyone in town has a front-row seat for the two-mile parade.

-
1. Which of the following is the main topic of the passage?
 - a) Traditional celebrations for the Fourth of July;
 - b) Holidays in the United States;
 - c) The origin of Independence Day;
 - d) Small towns in America.

 2. How is Independence Day observed in Ontario, California?
 - a) By hosting a powwow and rodeo;
 - b) By sponsoring a stock car event;
 - c) By squirting water from fire hoses;
 - d) By setting up tables along the parade route.

 3. The underlined word "huge" could best be replaced by:
 - a) exciting;
 - b) amusing;
 - c) complicated;
 - d) large.

 4. The underlined word "annual" is closest in meaning to:
 - a) traditional;
 - b) every year;
 - c) special;
 - d) at night.

 5. The underlined phrase "fire engine team" means:
 - a) volleyball team;
 - b) team players;
 - c) a group of firefighters;
 - d) a group of partisans.

 6. Choose the answer that indicates the distance for the parade in Ontario:
 - a) 1 mile;
 - b) 3,200 km;
 - c) 3.2 km;
 - d) 50 feet.

7. What does the author mean by the following statement? Hannibal, Missouri, the hometown of Mark Twain, invites the children to participate in a fence-painting contest, reenacting a scene from Twain's novel "Tom Sawyer":

a) The contest was the inspiration for Mark Twain's novel "Tom Sawyer".

b) In one scene from "Tom Sawyer", children repaint Mark Twain's home.

c) There is an art contest for children in honor of Mark Twain.

d) As a reenactment from "Tom Sawyer", children paint fences in a competition.

8. The author mentions all of the following as ways the Fourth of July is celebrated, except for

a) parades;

b) races;

c) dances;

d) fireworks;

9. It can be inferred from the passage that:

a) the Fourth of July is celebrated in Canada as well as in the United States;

b) towns in the United States celebrate the Fourth of July in different ways because of their regional customs;

c) although fireworks are not legal, they are displayed on the Fourth of July;

d) the Fourth of July is not celebrated in large cities in the United States.

Collectibles

Collectibles have been a part of almost every culture since ancient times. Whereas some objects have been collected for their usefulness, others have been selected for their aesthetic beauty alone. In the United States, the kinds of collectibles currently popular range from traditional objects such as stamps, coins, rare books, and art to more recent items of interest like dolls, bottles, baseball cards, and comic books.

Interest in collectibles has increased enormously during the past decade, in part because some collectibles have demonstrated their value as investments. Especially during cycles of high inflation, investors try to purchase tangibles that will at least retain *their* current market values. In general, the most traditional collectibles will be sought because they have preserved their value over the years, there is an organized auction market for them, and they are most easily sold in the event that cash is needed. Some examples of the most *stable* collectibles are old masters, Chinese ceramics, stamps, coins, rare books, antique jewelry, silver, porcelain, art by well-known artists, autographs, and period furniture.

Other items of more *recent* interest include old phonograph records, old magazines, post-cards, baseball cards, art glass, dolls, classic cars, old bottles, and comic books. These relatively new kinds of collectibles may actually appreciate faster as short-term investments, but may not hold their value as long-term investments. Once a collectible has had its initial play, it appreciates at a fairly steady rate, supported by an increasing number of enthusiastic collectors competing for the limited supply of collectibles that become increasingly more difficult to locate.

1. What is the author's main point?
 - a) Collectibles provide interesting information about culture.
 - b) Collectibles are better than other types of investments.
 - c) New types of collectibles appreciate more rapidly.
 - d) A variety of collectibles have become popular investments in the United States.

2. In comparing new collectibles with more traditional ones, the author observes that:
 - a) newer collectibles hold their value;
 - b) more traditional collectibles appreciate faster;
 - c) after a rapid increase in value, all collectibles have steady rates of appreciation;
 - d) newer collectibles make better short-term investments.

3. The underlined word "stable" could be replaced by:
 - a) prevalent;
 - b) reliable;

- c) expensive;
- d) exquisite.

4. The underlined word "recent" is closest in meaning to:

- a) other;
- b) long-term;
- c) old;
- d) new.

5. The underlined word "their" refers to:

- a) market values;
- b) cycles of high inflation;
- c) investors;
- d) tangibles.

6. Choose the sentence that indicates what type of collectible investors seek during cycles of high inflation:

a) Some examples of the most stable collectibles are old masters, Chinese ceramics, stamps, coins, rare books, antique jewelry, silver, porcelain, art by well-known artists, autographs, and period furniture.

b) Interest in collectibles has increased enormously during the past decade, in part because some collectibles have demonstrated their value as investments.

c) Especially during cycles of high inflation, investors try to purchase tangibles that will at least retain their current market values.

d) In general, the most traditional collectibles will be sought because they have preserved their value over the years, there is an organized auction market for them, and they are most easily sold in the event that cash is needed.

7. What does the author mean by the following statement? Whereas some objects have been collected for their usefulness, others have been selected for their aesthetic beauty alone:

a) In general, collectors choose objects that are both useful and beautiful.

b) Some beautiful objects are also useful to collectors.

c) Only the objects that are beautiful have appealed to collectors.

d) Objects may be attractive to collectors either because they are useful or because they are beautiful.

8. The author mentions all of the following as examples of new types of collectible items, except for:

- a) postcards;
- b) dolls;
- c) bottles;
- d) autographs;

9. The paragraph following the passage most probably discusses:

- a) how collectors locate and purchase collectibles;
- b) why collectibles are risky investments;
- c) where to buy collectible toys;
- d) when to sell a collectible item for profit.

Basketball

Although he created the game of basketball at the YMCA in Springfield, Massachusetts, Dr. James A. Naismith was a Canadian. Working as a physical education instructor at the International YMCA, now Springfield College, Dr. Naismith noticed a lack of interest in exercise among students during the wintertime. The New England winters were fierce, and the students *balked at* participating in outdoor activities. Naismith determined that a fast-moving game that could be played indoors would fill a void after the baseball and football seasons had ended.

First he attempted to adapt outdoor games such as soccer and rugby to indoor play, but he soon found *them* unsuitable for confined areas. Finally, he determined that he would have to invent a game. In December of 1891, Dr. Naismith hung two old peach baskets at either end of the gymnasium at the school, and, using a soccer ball and nine players on each side, organized the first basketball game. The early rules allowed three points for each basket and made running with the ball a violation. Every time a goal was made, someone had to climb a ladder to retrieve the ball.

Nevertheless, the game became popular. In less than a year, basketball was being played in both the United States and Canada. Five

years later, a championship tournament was staged in New York City, which was won by the Brooklyn Central YMCA.

The teams had already been reduced to seven players, and five became standard in the 1897 season. When basketball was introduced as a demonstration sport in the 1904 Olympic Games in St. Louis, it quickly spread throughout the world. In 1906, a metal hoop was *used for the first time* to replace the basket, but the name basketball has remained.

1. What does this passage mainly discuss?

- a) The Olympic Games in St. Louis in 1904.
- b) The development of basketball.
- c) The YMCA athletic program.
- d) Dr. James Naismith.

2. When was the first demonstration game of basketball held during the Olympics?

- a) 1891;
- b) 1892;
- c) 1897;
- d) 1904.

3. The underlined phrase "balked at" could best be replaced by:

- a) resisted;
- b) enjoyed;
- c) excelled at;
- d) were exhausted by.

4. The underlined phrase "used for the first time" is closest in meaning to:

- a) to replace the basket;
- b) has remained;
- c) was introduced;
- d) had already been reduced.

5. The underlined word "them" refers to:

- a) outdoor games;
- b) confined areas;

- c) the baseball and football seasons;
- d) indoor play.

6. Choose the paragraph that indicates the winner of the first basketball championship tournament.

- a) The teams had already been reduced to seven players;
- b) Nevertheless, the game became popular;
- c) Although he created the game of basketball at the YMCA in Springfield, Massachusetts, Dr. James A. Naismith was a Canadian;
- d) First he attempted to adapt outdoor games such as soccer and rugby to indoor play.

7. What does the author mean by the following statement? When basketball was introduced as a demonstration sport in the 1904 Olympic Games in St. Louis, it quickly spread throughout the world:

- a) Basketball was not considered an Olympic sport at the St. Louis games.
- b) Basketball became popular worldwide after its introduction at the Olympic Games in St. Louis.
- c) Basketball players from many countries competed in the Olympic Games in St. Louis.
- d) Basketball was one of the most popular sports at the Olympic Games in St. Louis.

8. The author mentions all of the following as typical of the early game of basketball, except for:

- a) Three points were scored for every basket.
- b) Running with the ball was not a foul.
- c) Nine players were on a team.
- d) The ball had to be retrieved from the basket after each score.

9. It can be inferred from the passage that the original baskets:

- a) were not placed very high;
- b) had a metal rim;
- c) did not have a hole in the bottom;
- d) were hung on the same side of the basketball court.

Part IV. SCIENTIFIC RESEARCH

Модель учебной «научной» конференции

Задача учебной конференции – полностью смоделировать настоящую научную встречу как одну из форм научной коммуникации.

Вопросы подготовки и проведения научной встречи, как правило, находятся в ведении организационного комитета (*Organizing Committee*). Поэтому рекомендуется в каждой учебной группе создать организационный комитет по проведению конференций.

Работа организационного комитета

Организационный комитет определяет форму предстоящей «национальной» или «международной» встречи (*scientific meeting*) и процедуру ее проведения. Формы научных встреч могут быть разнообразными и варьироваться: *conferences* (*Ground-table conferences*), *symposia* (*symposium*), *colloquia* (*colloquium*), *seminars* или *workshops*, *sessions*, *general assemblies*, *congresses*, *studies*, *schools*, *teach-ins*.

Организационный комитет определяет тему конференции (*theme of the conference*), формулирует основную тему (*central/major theme*) и широкий диапазон сопутствующих вопросов для обсуждения (*topics for discussion*). Организационный комитет выбирает председателя конференции (*chairman of the conference*), определяет количество докладов (*papers*) и назначает докладчиков (*speakers*), оппонентов (*opponents*), участников в прениях, а также выбирает научный комитет (*Scientific Committee*) и художественный комитет (*Jury for Art*) (2–3 человека в зависимости от числа участников).

Памятка докладчику

Докладчики (*speakers*) предварительно представляют председателю конференции тему своего выступления (*title*) и краткие

тезисы (*short abstracts*) для составления программы ведения конференции.

Выступающий с докладом должен помнить принципиальное отличие статьи от доклада. Статью читают, и при чтении есть возможность задержаться на интересных или сложных для понимания местах, вернуться назад или забежать вперед, изучать схемы, таблицы, графики и т. д. Доклад же слушают, и упомянутых выше возможностей у слушателя нет. Поэтому к докладу предъявляются следующие требования:

- логичность изложения и четкая структурная организация содержания (введение, основная часть, заключение);
- использование визуальных средств (название темы, свое имя, страну, иллюстрации к докладу, цифры, формулы и уравнения, если они приводятся в докладе);
- язык доклада должен быть простым и понятным присутствующим.

Свое выступление докладчик, как правило, начинает с обращения к председателю заседания и присутствующим коллегам, и он может подчеркнуть, что выступать на данной конференции — большая для него честь:

"Mr. Chairman. Ladies and Gentlemen. I am greatly honored to be invited to address this conference."

Затем следует объявить тему своего сообщения:

"I would like to talk in this paper about ..."

"The object of this paper is to..."

Затем докладчик переходит к вводной части своего доклада посредством одного из следующих образцов:

"As many of you know ..."

"First of all I would like to ..."

"In the introduction of my paper I should like to ..."

"Let 'me begin with ..."

Перейти от вводной части к основной целесообразно с помощью следующей фразы:

"Now, after a short introduction, I would like to turn to the main part of my paper."

Содержание основной части доклада полностью определяется его конкретной тематикой. Сначала дается более или менее обобщенное представление об обсуждаемом вопросе, а затем внимание заостряется на отдельных деталях. Ниже приводятся некоторые типичные речевые обороты, обеспечивающие логические связи и переходы внутри текста доклада, а также позволяющие управлять вниманием аудитории:

"According to this theory..."

"I want to emphasize that..."

"Allow me to call your attention to..."

"As an example I can suggest..."

"As far as I am concerned ..."

"As far as I know..."

"As I have already mentioned..."

В заключение доклада выступающий подводит итог сказанному, например, такой фразой:

"Now let me review what I have said about."

Напоследок докладчик может обратить внимание на историческое значение данной проблемы и закончить свое выступление фразой:

"Thank you for your attention."

Представим примерный план выступления на научной конференции (табл. 1).

Таблица 1

План подготовки доклада выступления
на научной конференции

The plan for discussion the work	Some expressions to be used while discussion the work
Where did you study at?	I studied at
What university did you graduate from?	I graduated from
Do you study now?	<ul style="list-style-type: none"> • Yes, I do. I am a postgraduate student. • I study at the postgraduate courses.

Окончание табл. 1

The plan for discussion the work	Some expressions to be used while discussion the work
<ul style="list-style-type: none"> • What are your scientific interests? • What field are your scientific interests in? • What scientific trends are you interested in? 	<ul style="list-style-type: none"> • My scientific interests are ... • They are in the field of ... • I am interested in ...
What is the title of your thesis?	<ul style="list-style-type: none"> • The title is ... • The title of my thesis is ...
<ul style="list-style-type: none"> • What problems does it deal with? • What do you investigate? 	<ul style="list-style-type: none"> • It deals with ... • I investigate smth ... (why, how).
<ul style="list-style-type: none"> • Who is your supervisor? • Whose supervision do you work under? 	<ul style="list-style-type: none"> • My supervisor is ... • I work under the supervision ...
What is necessary for you to do to submit your thesis?	It is necessary for me to collect information (data), to read much literature on the problem under discussion, to carry out many experiments, to test equipment etc.
Is your work of practical (theoretical) value?	It is of practical and theoretical value
Why did you choose this problem?	It is actual (urgent, modern, important ...) because ...
Have you got any publications?	I have some and I'll publish the result obtained later
<ul style="list-style-type: none"> • What do you expect of your work? • What are the prospects of your work? 	<ul style="list-style-type: none"> • I expect (hope, believe, am sure) that it will find wide application. • I ... that I'll submit my paper successfully

Памятка оппоненту

Задача оппонента – отметить сильные и слабые места выступления и высказать свое отношение к предмету. Иногда оппонент находит нужным представиться, а затем уже высказать свои соображения по обсуждаемой проблеме:

"My name is John Brown. I am from California University and I want to take two minutes to react to some of the things that were said

here today on Professor Petrols paper. I would like to give you my views on this subject."

Оппонент может сделать комплимент по поводу доклада:

"I am very impressed with Dr. Ivanov's fluent and forceful presentation."

Идею поддержки позиции автора можно выразить следующими словами:

"I would like to express agreement with the speaker."

"I want to support very strongly the position of Dr. Ivanov."

Если высказываются сомнения или возражения, то участники конференции предпочитают осторожные формулировки:

"I am not sure that this approach is justified."

"Unfortunately, I cannot agree with your final statement."

"I am very sorry to have to say that I do not agree with Dr. Jones."

Задачи научного и художественного комитетов

Эти задачи состоят в оценке качества докладов и выявлении победителей согласно разработанному критерию оценок. Каждый из комитетов состоит из трех человек, не выступающих с докладами. В случае немногочисленности группы эту функцию могут выполнять члены организационного комитета и председатель. Комитет выбирает своего председателя. Перед началом конференции председатели комитетов передают председателю конференции список комитетов с указанием фамилий членов комиссий, их ученых званий и стран, из которых они прибыли.

Рассмотрим критерии оценки докладов:

1. *Научным комитетом:*

- логичность (последовательность) изложения;
- доступность (простота) высказывания;
- информативность и новизна информации, содержащейся в докладе;
- соответствие выступления теме конференции;

– интерес аудитории (определяется по количеству вопросов, заданных докладчику, и числу сопутствующих выступлений в *пре-ниях*).

2. *Художественным комитетом:*

– оригинальность изложения – умение докладчика связать тему выступления с реальной ситуацией. Так, выступающий может попросить аудиторию представить себе, что сказали бы по поводу обсуждаемой проблемы участники конференции полвека назад:

"To begin with let's imagine that our conference took place some fifty years ago. The speaker at such a meeting would have described the entire Universe in terms of the actions of two forces, gravitation and electromagnetism";

– широкое применение наглядности (схемы, графики и т. п.);

– чувство юмора, которое должно присутствовать в каждом докладе;

– ясность, информативность и краткость заглавия и его соответствие содержанию доклада;

– умение докладчика держаться непринужденно.

Примерная речь председателя научного комитета:

"Dear friends! After a long/hot discussion we have come to the conclusion that the best paper was presented by ... from The second place is given to ... from And the third place is given to ... from The Committee would be glad to note an active participation in the discussion of the representative of ... – Mr. Smith, who showed his great interest in the subject. Thank you for your attention."

Речь председателя художественного комитета примерно такая же, кроме следующих слов:

"We are glad to declare that the author of the best illustrations to his paper is Mr. Danilov. I would like to note specially a great sense of humor in the illustrations of Mr. Wilson. Our congratulations to the winners and thank you all for your attention."

Памятка председателю о ведении конференции

Председатель (*chairman of the session/session chairman*) руководит дискуссией на данном заседании, представляя каждого выступающего. Он называет страну, из которой тот прибыл, организацию, в которой тот работает, и сообщает тему доклада. Обычно председатель дает краткий личный комментарий, в частности указывает на вклад докладчика в исследование обсуждаемой проблемы:

"The next speaker is Dr. Ivanov from the USA. The title of his paper is '...'. Dr. Ivanov is well-known among the physicists for his numerous books on this subject."

Председатель в своем вступительном слове не должен использовать фрагменты предстоящего доклада и раскрывать его «секреты». По окончании доклада (или нескольких) председатель благодарит ораторов, говорит несколько слов по поводу их выступлений и открывает дискуссию:

"I want to thank our speakers for their interesting and highly stimulating presentations. And now let me open the discussion not with opinions or statements but with questions."

Он может конкретно указать, какой доклад предполагается обсудить:

"And now I would like to open the discussion by asking for your comments on the paper given by Professor Green. Are there any questions to Professor Green?"

Если председателю заранее известны участники, желающие поделиться своими соображениями по затронутым вопросам, то он прямо называет имя первого выступающего:

"The discussion will be opened by a contribution from Dr. Johnson from the University of London."

Если вопросы подаются в письменном виде, то председатель знакомится с ними, оценивает их адекватность теме данной дискуссии и передает докладчику:

"I have two questions here. I have just received them and I think they are worth of consideration."

Дискуссия должна быть ограничена во времени, выступления должны быть краткими, вопросы – конкретными (их следует подготовить заранее), стиль общения – уважительным, как бы ни отличались мнения сторон. Председатель может попросить выступающих высказываться в краткой форме:

"Time is rather short, so we would invite the speaker to be brief."

При отходе выступающего от темы председатель просит:

"I would like to ask the speakers to keep to the point in their remarks."

В исключительных случаях председатель может прервать дискуссию:

"I am afraid we must break off the discussion."

Завершая дискуссию, председатель еще раз благодарит докладчиков за интересные сообщения, предлагает прекратить дискуссию и подводит итоги:

"If there are no more questions we once again thank Dr. Jones for his excellent presentation. Thank you very much, Dr. Jones. And now it is time to sum up the discussion and make suggestions for the conclusions."

Председатель может выразить свое мнение по обсуждаемой проблеме:

"I shall not take advantage of my position as chairman in order to comment, point by point, on all Dr. Brown's remarks, but I would like to mention a few. Let's take the relationship between temperature and pressure. I think Dr. Brown is right/wrong when he emphasizes this point."

В заключение председатель благодарит выступающих и присутствующих за участие в дискуссии, подчеркивает важность объединения усилий для решения научных проблем и передает слово председателям научного и художественного комитетов:

"We have all felt during this session that it is important to join our forces and try to solve problems together. I would like to thank everybody here for their active participation in our discussion. In the

course of our Conference two committees were working and now we shall listen to the results of their work."

После отчетов председателей комитетов председатель конференции закрывает конференцию:

"I would like to thank once again all of you and with this I declare the Conference closed. Thank you."

Написание статей

Средства логико-смысловой ориентации в научной статье

При написании научных статей авторы обычно пользуются следующими логическими средствами изложения:

– **детализация** – весьма тщательное, всестороннее объяснение понятия;

– **анализ** – деление данного понятия на ряд составных частей и установление между ними соответствующих взаимоотношений;

– **сравнение** – приведение примера из области знакомого для объяснения незнакомого;

– **аналогия** – разновидность сравнения двух разных понятий, имеющих какие-либо общие черты;

– **доказательство от противного**;

– **этимология** – определение при помощи указания на происхождение слова с последующим его описанием;

– **иллюстрации** – таблицы, рисунки, схемы, фото (табл. 2).

Типичная журнальная статья, отвечающая требованиям лаконичного и ясного изложения, без длинных введений и повторений, при строго логической последовательности имеет довольно стабильную композиционную структуру с заранее известным перечнем и содержанием основных ее частей.

Общая схема научной статьи может быть представлена в следующем виде:

1. Заголовок (**Title**).
2. Аннотация (**Abstract**).
3. Введение (**Introduction**).
4. Методика и материалы (**Methods and Material; Procedure**).
5. Результаты (**Results**).
6. Обсуждение полученных результатов (**Discussion**).

7. Заключение и рекомендации (*Conclusions' and Recommendations*).

8. Выводы (*Summary*).

9. Литература (*References; Literature; Bibliography*).

Все эти компоненты, в свою очередь, объединяются в три логические группы:

- вводную часть (заголовки, аннотация, введение), формулирующую задачу и цель работы;
- основной текст, решающий эту задачу;
- заключение (результаты, обсуждение полученных результатов, рекомендации, выводы), указывающее, в какой степени эта задача решена.

Таблица 2

Типичная лексика, встречающаяся в научных статьях

Название источников	Journal, Magazine, Proceedings, Transactions, Bulletin, Record, Review, News, Archives, Abstracts
Слова, характеризующие категорию самой работы автора, дающие ей название	Studies, Observation, Investigation, Paper, Report, Note, Review, Survey, Comparative Studies, Preliminary Report, Further Investigation, Brief survey
Слова, относящиеся к природе и методике научного исследования	Nature, History, Origin, Method, Problem, Approach, Aspect
Слова, выражающие понятия «значение», «роль», «оценка» элементов исследования	Role, Significance, Value, Estimation
Слова, выражающие взаимоотношение между научными понятиями	Relationship between, Effect on (upon), Influence on (upon).
Слова, относящиеся к понятию свойства	Properties, Characteristics, Characterization
Слова, выражающие действие, динамику	Action, Dynamics, Mechanism, Function, Reaction, Response

Заголовок отражает информационный объем текста и некоторые аспекты его освещения, мобилизует внимание читателя. Заголовки идут в оглавление, в предметный индекс и другие библиографические издания. Это обстоятельство стандартизирует их форму и размер, существенно влияет на образование определенно-

го круга синтаксических моделей и на выбор специфической общенаучной лексики.

Специфика научных исследований, требующая детального изучения различных проблем, к разработке и описанию которых многократно возвращаются многие авторы на протяжении длительного времени, приводит к образованию устойчивых моделей с постоянной лексикой.

В структуре научного текста усматриваются три основные части: вводная, основной текст и заключительная часть. Такая схема напоминает схему геометрической теоремы, в которой введение соответствует тому, что дано и надо доказать, основной текст соответствует действиям для доказательства, заключение – тому, что надо было доказать. В соответствии с этим аннотация (*Abstract*) и выводы (*Summary*) обнаруживают много общих черт как по содержанию, так и по выразительным средствам, причем *Summary* выступает в роли своеобразного эха аннотации – *Abstract*.

Если заглавие статьи привлекает внимание читателя лишь поверхностным знакомством с содержанием исследования, то аннотация знакомит его также и с результатами, к которым пришел автор, и с выводом, который он сделал. Аннотация является конденсированной формой самой статьи, представленной в виде абзаца или нескольких абзацев со всеми его структурными элементами, в которых наиболее четко выделяются зачины и концовки.

Заключительная часть статьи (*Summary*) содержит краткие выводы, вытекающие из проделанной работы. Каждый существенный вывод заключен в отдельный абзац или несколько абзацев, имеющих характер самостоятельного тезиса. Абзацы-выводы, как правило, нумеруются.

Синтаксическая связь между такими занумерованными абзацами не только значительно ослаблена, но и обычно вовсе отсутствует. Порядок следования членов предложения стандартный. Преобладает страдательный залог, причем сказуемое отдалено от подлежащего на значительное расстояние, а нередко оказывается в конце предложения, напоминая тем самым структуру английского предложения. Характерно употребление *Present Perfect*. Здесь имеет место полное соответствие нормативной грамматике, согласно которой это глагольное время выражает завершенность, результат

действия, т. е. то, что является основной информативной функцией *Summary*. Из типичной лексики выделяются глаголы, выражающие действия, связанные с ходом научных исследований: *has been described, has been investigated, has been presented*.

Введение в современных статьях, как правило, не содержит несущественных деталей, длинных исторических обзоров, излишних описаний. Познакомившись с объектом исследований и его значением, читатель тотчас же переключает свой интерес на следующие разделы статьи, в которых ищет ответ на поставленные вопросы.

Поэтому авторы обычно придерживаются строгой логической последовательности в изложении, плавно переходя от одного вопроса к другому. Разрыв в изложении материала, применяемый в художественной литературе в качестве особого приема для возбуждения интереса и заострения внимания читателя, не характерен для научной литературы.

Такие важные вспомогательные элементы текста, как «большой интерес представляет», «как указано выше», «далее рассмотрим» и т. п., не только облегчают автору процесс создания своего труда, но и повышают эффективность его восприятия.

Для выражения ссылок на ранее сказанное положение пользуются следующими штампами: *as has already been described (mentioned, stated, stressed, emphasized)* или *as has been described above (earlier, recently)*.

ЗАКЛЮЧЕНИЕ

Мы надеемся, что предложенные материалы были полезными и интересными и способствовали совершенствованию умений и навыков чтения, перевода, реферирования и аннотирования оригинальной литературы по направлению подготовки, а также профессионально ориентированного общения. Хочется выразить уверенность в том, что полученные знания помогут вам сдать кандидатский минимум по английскому языку только на «хорошо» и «отлично», а также будут полезными в дальнейшей научной работе.

Желаем успеха!

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