

Systems
Systems Analysis
Systems Modeling

Les Waguespack, Ph.D.
Spring 2011



reality life
experience perception
belief satisfaction
knowledge system information
understanding representation
intuition communication
model success
language

system

system |'sistəm| noun

1 a set of connected things or parts forming a complex whole, in particular

- a set of things working together as parts of a mechanism or an interconnecting network : *the state railroad system* | *fluid is pushed through a system of pipes or channels.*
- Physiology a set of organs in the body with a common structure or function : *the digestive system.*
- the human or animal body as a whole : *you need to get the cholesterol out of your system.*
- Computing a group of related hardware units or programs or both, esp. when dedicated to a single application.
- Geology (in chronostratigraphy) a major range of strata that corresponds to a period in time, subdivided into series.
- Astronomy a group of celestial objects connected by their mutual attractive forces, esp. moving in orbits about a center : *the system of bright stars known as the Gould Belt.*
- short for **crystal system** .

2 a set of principles or procedures according to which something is done; an organized scheme or method : *a multiparty system of government* | *the public school system.*

- orderliness; method : *there was no system at all in the company.*
- a method of choosing one's procedure in gambling.
- a set of rules used in measurement or classification : *the metric system.*
- (**the system**) the prevailing political or social order, esp. when regarded as oppressive and intransigent : *don't try bucking the system.*

3 Music a set of staves in a musical score joined by a brace.

system

system |'sistəm| noun

1 a set of connected things or parts forming a complex whole, in particular

- a set of things **working together as parts of a mechanism** or an interconnecting network : *the state railroad system* | *fluid is pushed through a system of pipes or channels.*
- Physiology a set of organs in the body with a **common structure or function** : *the digestive system.*
- the human or animal body as a whole : *you need to get the cholesterol out of your system.*
- Computing **a group of related hardware units or programs or both**, esp. when dedicated to a single application.
- Geology (in chronostratigraphy) a major range of strata that corresponds to a period in time, subdivided into series.
- Astronomy a group of celestial objects connected by their mutual attractive forces, esp. moving in orbits about a center : *the system of bright stars known as the Gould Belt.*
- short for **crystal system** .

2 a set of principles or procedures according to which something is done; an organized scheme or method : *a multiparty system of government* | *the public school system.*

- **orderliness; method** : *there was no system at all in the company.*
- a method of choosing one's procedure in gambling.
- a set of rules used in measurement or classification : *the metric system.*
- (**the system**) the prevailing political or social order, esp. when regarded as oppressive and intransigent : *don't try bucking the system.*

3 Music a set of staves in a musical score joined by a brace.

reality

reality |rē'alətē|

noun (pl. **-ties**)

1 the world or the state of things as they actually exist, as opposed to an idealistic or notional idea of them : *he refuses to face reality* | *Laura was losing touch with reality.*

- ♦
 - a thing that is actually experienced or seen, esp. when this is grim or problematic : *the harsh **realities** of life in a farming community* | *the law ignores **the reality** of the situation.*
- ♦
 - a thing that exists in fact, having previously only existed in one's mind : *the paperless office may yet become a reality.*
- ♦
 - the quality of being lifelike or resembling an original : *the reality of Marryat's detail.*

2 the state or quality of having existence or substance : *youth, when death has no reality.*

- Philosophy existence that is absolute, self-sufficient, or objective, and not subject to human decisions or conventions.

reality

reality |rē'alətē|

noun (pl. **-ties**)

1 the world or the state of things as they actually exist, as opposed to an idealistic or notional idea of them : *he refuses to face reality* | *Laura was losing touch with reality.*

- ♦ • **a thing that is actually experienced or seen**, esp. when this is grim or problematic : *the harsh **realities** of life in a farming community* | *the law ignores **the reality** of the situation.*
- ♦ • **a thing that exists in fact, having previously only existed in one's mind** : *the paperless office may yet become a reality.*
- ♦ • **the quality of being lifelike or resembling an original** : *the reality of Marryat's detail.*

2 the state or quality of having existence or substance : *youth, when death has no reality.*

- Philosophy existence that is absolute, self-sufficient, or objective, and not subject to human decisions or conventions.

life . . .

life |līf| noun (pl. **lives** |līvz|)

1 the condition that distinguishes animals and plants from inorganic matter, including the capacity for growth, reproduction, functional activity, and continual change preceding death : *the origins of life.*

- living things and their activity : *some sort of life existed on Mars | lower forms of life | the ice-cream vendors were the only signs of life.*
- the state of being alive as a human being : *she didn't want to die; she loved life | a superficial world where life revolved around the minutiae of outward appearance.*
- [with adj.] a particular type or aspect of people's existence : *an experienced teacher will help you settle into school life | revelations about his private life.*
- vitality, vigor, or energy : *she was beautiful and full of life.*

life . . .

life |līf| noun (pl. **lives** |līvz|)

1 the condition that distinguishes animals and plants from inorganic matter, **including the capacity for growth, reproduction, functional activity, and continual change preceding death** : *the origins of life.*

- living things and their activity : *some sort of life existed on Mars | lower forms of life | the ice-cream vendors were the only signs of life.*
- the state of being alive as a human being : *she didn't want to die; she loved life | a superficial world where life revolved around the minutiae of outward appearance.*
- [with adj.] a particular type or aspect of people's existence : *an experienced teacher will help you settle into school life | revelations about his private life.*
- vitality, vigor, or energy : *she was beautiful and full of life.*

... life

2 the existence of an individual human being or animal : *a disaster that claimed the lives of 266 Americans.*

- [often with adj.] a way of living : *his father decided to start a new life in California.*
- a biography : *a life of Shelley.*
- either of the two states of a person's existence separated by death (as in Christianity and some other religious traditions) : *too much happiness in this life could reduce the chances of salvation in the next.*
- any of a number of successive existences in which a soul is held to be reincarnated (as in Hinduism and some other religious traditions).
- a chance to live after narrowly escaping death (esp. with reference to the nine lives traditionally attributed to cats).

3 (usu. **one's life**) the period between the birth and death of a living thing, esp. a human being : *she has lived all her life in the country* | *I want to be with you for the rest of my life* | *they became friends **for life**.*

- the period during which something inanimate or abstract continues to exist, function, or be valid : *underlay helps to prolong the life of a carpet.*
- informal a sentence of imprisonment for life.

4 (in art) the depiction of a subject from a real model, rather than from an artist's imagination : *the pose and clothing were sketched **from life*** | [as adj.] *life drawing*. See also **still life** .

... life

2 the existence of an individual human being or animal : *a disaster that claimed the lives of 266 Americans.*

- [often with adj.] a way of living : *his father decided to start a new life in California.*
- a biography : *a life of Shelley.*
- either of the two states of a person's existence separated by death (as in Christianity and some other religious traditions) : *too much happiness in this life could reduce the chances of salvation in the next.*
- **any of a number of successive existences in which a soul is held to be reincarnated** (as in Hinduism and some other religious traditions).
- a chance to live after narrowly escaping death (esp. with reference to the nine lives traditionally attributed to cats).

3 (usu. **one's life**) **the period between the birth and death of a living thing**, esp. a human being : *she has lived all her life in the country* | *I want to be with you for the rest of my life* | *they became friends for life.*

- **the period during which something inanimate or abstract continues to exist, function, or be valid** : *underlay helps to prolong the life of a carpet.*
- informal a sentence of imprisonment for life.

4 (in art) **the depiction of a subject from a real model**, rather than from an artist's imagination : *the pose and clothing were sketched from life* | [as adj.] *life drawing*. See also **still life** .

knowledge

knowledge |'nälij|

noun

1 facts, information, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject : *a thirst for knowledge* | *her considerable **knowledge** of antiques.*

- what is known in a particular field or in total; facts and information : *the transmission of knowledge.*

- Philosophy true, justified belief; certain understanding, as opposed to opinion.

2 awareness or familiarity gained by experience of a fact or situation : *the program had been developed **without his knowledge*** | *he denied all knowledge of the overnight incidents.*

knowledge

knowledge |'nälij|

noun

1 facts, information, and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject : *a thirst for knowledge* | *her considerable **knowledge** of antiques.*

- what is known in a particular field or in total; facts and information : *the transmission of knowledge.*
- Philosophy true, justified belief; certain understanding, as opposed to opinion.

2 awareness or familiarity gained by experience of a fact or situation : *the program had been developed **without his knowledge** | he denied all knowledge of the overnight incidents.*

understanding

understand |,əndər'stænd|

verb (past and past part. **-stood**)

1 [trans.] perceive the intended meaning of (words, a language, or speaker) : *he didn't understand a word I said* | *he could usually **make himself understood*** | [with clause] *she understood what he was saying*

- perceive the significance, explanation, or cause of (something) : *she didn't really understand the situation* | [with clause] *he couldn't understand why we burst out laughing* | [intrans.] *you don't understand—she has left me.*

- be sympathetically or knowledgeably aware of the character or nature of : *Picasso understood color* | [with clause] *I understand how you feel.*

- interpret or view (something) in a particular way : *as the term is usually understood, legislation refers to regulations and directives.*

2 [with clause] infer something from information received (often used as a polite formula in conversation) : *I understand you're at art school* | [trans.] *as I understood it, she was flying back to New Zealand tomorrow.*

- [trans.] (often **be understood**) regard (a missing word, phrase, or idea) as present; supply mentally : *"present company excepted" is always understood when sweeping generalizations are being made.*

- [trans.] (often **be understood**) assume to be the case; take for granted : *he liked to play the field—that was understood.*

understanding

understand |,əndər'stænd|

verb (past and past part. **-stood**)

1 [trans.] **perceive the intended meaning** of (words, a language, or speaker) : *he didn't understand a word I said* | *he could usually **make himself understood*** | [with clause] *she understood what he was saying*

- **perceive the significance, explanation, or cause of** (something) : *she didn't really understand the situation* | [with clause] *he couldn't understand why we burst out laughing* | [intrans.] *you don't understand—she has left me.*

- be sympathetically or knowledgeably aware of the character or nature of : *Picasso understood color* | [with clause] *I understand how you feel.*

- interpret or view (something) in a particular way : *as the term is usually understood, legislation refers to regulations and directives.*

2 [with clause] infer something from information received (often used as a polite formula in conversation) : *I understand you're at art school* | [trans.] *as I understood it, she was flying back to New Zealand tomorrow.*

- [trans.] (often **be understood**) regard (a missing word, phrase, or idea) as present; supply mentally : *"present company excepted" is always understood when sweeping generalizations are being made.*

- [trans.] (often **be understood**) assume to be the case; take for granted : *he liked to play the field—that was understood.*

perception

perception |pər'sep sh ən|

noun

the ability to see, hear, or become aware of something through the senses : *the normal limits to human perception.*

- the state of being or process of becoming aware of something in such a way : *the perception of pain.*
- a way of regarding, understanding, or interpreting something; a mental impression : *Hollywood's perception of the tastes of the American public | we need to challenge many popular perceptions of old age.*
- intuitive understanding and insight : *"He wouldn't have accepted," said my mother with unusual perception.*
- Psychology & Zoology the neurophysiological processes, including memory, by which an organism becomes aware of and interprets external stimuli.

perception

perception |pər'sep sh ən|

noun

the **ability to** see, hear, or **become aware of something through the senses** : *the normal limits to human perception.*

- the state of being or process of becoming aware of something in such a way : *the perception of pain.*
- **a way of regarding, understanding, or interpreting something; a mental impression** : *Hollywood's perception of the tastes of the American public* | *we need to challenge many popular perceptions of old age.*
- **intuitive understanding** and insight : *"He wouldn't have accepted," said my mother with unusual perception.*
- Psychology & Zoology **the neurophysiological processes, including memory, by which an organism becomes aware of and interprets external stimuli.**

intuition

intuition |ˌɪnt(y)oʊˈiʃ ən|

noun

the ability to understand something immediately, without the need for conscious reasoning : *we shall allow our intuition to guide us.*

- a thing that one knows or considers likely from instinctive feeling rather than conscious reasoning : *your insights and intuitions as a native speaker are positively sought.*

intuition

intuition |ˌɪnt(y)oʊˈiʃ ən|

noun

the ability to understand something immediately, without the need for conscious reasoning : *we shall allow our intuition to guide us.*

- **a thing that one knows or considers likely from instinctive feeling rather than conscious reasoning** : *your insights and intuitions as a native speaker are positively sought.*

belief

belief |bi'lēf|

noun

1 an acceptance that a statement is true or that something exists : *his **belief in** God* | *a **belief that** solitude nourishes creativity.*

- something one accepts as true or real; a firmly held opinion or conviction : *c.ontrary to popular belief, Aramaic is a living language* | *we're prepared to fight for our beliefs.*

See note at **opinion** .

- a religious conviction : *Christian beliefs* | *I'm afraid to say belief has gone* | *local beliefs and customs.*

2 (**belief in)** trust, faith, or confidence in someone or something : *a belief in democratic politics* | *I've still got belief in myself.*

belief

belief |bi'lēf|

noun

1 an **acceptance that a statement is true or that something exists** : *his **belief in** God* | *a **belief that** solitude nourishes creativity.*

- something one accepts as true or real; a firmly held opinion or conviction : *c.ontrary to popular belief, Aramaic is a living language* | *we're prepared to fight for our beliefs.*

See note at **opinion** .

- a religious conviction : *Christian beliefs* | *I'm afraid to say belief has gone* | *local beliefs and customs.*

2 (**belief in)** trust, faith, or confidence in someone or something : *a belief in democratic politics* | *I've still got belief in myself.*

information

information |ˌɪnfərˈmā sh ən|

noun

1 facts provided or learned about something or someone : *a vital piece of information*. See note at **knowledge** .

- Law a formal criminal charge lodged with a court or magistrate by a prosecutor without the aid of a grand jury : *the tenant may lay an information against his landlord*.

2 what is conveyed or represented by a particular arrangement or sequence of things : *genetically transmitted information*.

- Computing data as processed, stored, or transmitted by a computer.
- (in information theory) a mathematical quantity expressing the probability of occurrence of a particular sequence of symbols, impulses, etc., as contrasted with that of alternative sequences.

information

information |ˌɪnfərˈmā sh ən|

noun

1 facts provided or learned about something or someone : *a vital piece of information*. See note at **knowledge** .

- Law a formal criminal charge lodged with a court or magistrate by a prosecutor without the aid of a grand jury : *the tenant may lay an information against his landlord*.

2 what is conveyed or represented by a particular arrangement or sequence of things : *genetically transmitted information*.

- Computing **data as processed, stored, or transmitted by a computer**.
- (in information theory) **a mathematical quantity expressing the probability of occurrence of a particular sequence of symbols**, impulses, etc., as contrasted with that of alternative sequences.

communication

communication |kəˌmyoʊnəˈkā sh ən|

noun

1 the imparting or exchanging of information or news : *direct communication between the two countries will produce greater understanding* | *at the moment I am **in communication with** London.*

- a letter or message containing such information or news.
- the successful conveying or sharing of ideas and feelings : *there was a lack of **communication between** Pamela and her parents.*
- social contact : *she gave him some hope of her return, or at least of their future communication.*

2 (communications) means of connection between people or places, in particular

- the means of sending or receiving information, such as telephone lines or computers : *satellite communications* | [as adj.] *a communications network.*
- the means of traveling or of transporting goods, such as roads or railroads : *a city providing excellent road and rail communications.*
- [treated as sing.] the field of study concerned with the transmission of information by various means.

communication

communication |kəˌmyoʊnəˈkā sh ən|

noun

1 the **imparting or exchanging of information** or news : *direct communication between the two countries will produce greater understanding* | *at the moment I am **in communication with** London.*

- a letter or message containing such information or news.
- the successful **conveying or sharing of ideas** and feelings : *there was a lack of **communication between** Pamela and her parents.*
- social contact : *she gave him some hope of her return, or at least of their future communication.*

2 (communications) means of connection between people or places, in particular

- the means of sending or receiving information, such as telephone lines or computers : *satellite communications* | [as adj.] *a communications network.*
- the means of traveling or of transporting goods, such as roads or railroads : *a city providing excellent road and rail communications.*
- [treated as sing.] the field of study concerned with the transmission of information by various means.

language

language |'la ng gwij|

noun

1 the method of human communication, either spoken or written, consisting of the use of words in a structured and conventional way : *a study of the way children learn language* | [as adj.] *language development.*

- any nonverbal method of expression or communication : *a language of gesture and facial expression.*

2 the system of communication used by a particular community or country : *the book was translated into twenty-five languages.*

- Computing a system of symbols and rules for writing programs or algorithms : *a new programming language.*

3 the manner or style of a piece of writing or speech : *he explained the procedure in simple, everyday language.*

- the phraseology and vocabulary of a certain profession, domain, or group of people : *legal language.*
- (usu. as **bad/strong language**) coarse, crude, or offensive language : *strong language.*

language

language |'la ng gwij|

noun

1 the method of human communication, either spoken or written, consisting of the use of words in a structured and conventional way : *a study of the way children learn language* | [as adj.] *language development*.

- any nonverbal method of expression or communication : *a language of gesture and facial expression*.

2 the system of communication used by a particular community or country : *the book was translated into twenty-five languages*.

- Computing a system of symbols and rules for writing programs or algorithms : *a new programming language*.

3 the manner or style of a piece of writing or speech : *he explained the procedure in simple, everyday language*.

- **the phraseology and vocabulary of a certain profession, domain, or group of people** : *legal language*.
- (usu. as **bad/strong language**) coarse, crude, or offensive language : *strong language*.

model

model |'mädl|

noun

1 a three-dimensional representation of a person or thing or of a proposed structure, typically on a smaller scale than the original : *a model of St. Paul's Cathedral* | [as adj.] *a model airplane*.

- (in sculpture) a figure or object made in clay or wax, to be reproduced in another more durable material.

2 a system or thing used as an example to follow or imitate : *the law became a model for dozens of laws banning nondegradable plastic products* | [as adj.] *a model farm*.

- a simplified description, esp. a mathematical one, of a system or process, to assist calculations and predictions : *a statistical model used for predicting the survival rates of endangered species*.

- (**model of**) a person or thing regarded as an excellent example of a specified quality : *as she grew older, she became a model of self-control* | [as adj.] *he was a model husband and father*.

- (**model for**) an actual person or place on which a specified fictional character or location is based : *the author denied that Marilyn was the model for his tragic heroine*.

3 a person, typically a woman, employed to display clothes by wearing them : *a fashion model*.

- a person employed to pose for an artist, photographer, or sculptor.

4 a particular design or version of a product : *trading your car in for a newer model*.

model

model |'mäd|

noun

1 a three-dimensional **representation of** a person or **thing or of a proposed structure**, typically on a smaller scale than the original : *a model of St. Paul's Cathedral* | [as adj.] *a model airplane*.

- (in sculpture) a figure or object made in clay or wax, to be reproduced in another more durable material.

2 a system or thing used as an example to follow or imitate : *the law became a model for dozens of laws banning nondegradable plastic products* | [as adj.] *a model farm*.

- **a simplified description, esp. a mathematical one, of a system or process, to assist calculations and predictions** : *a statistical model used for predicting the survival rates of endangered species*.

- (**model of**) a person or thing regarded as an excellent example of a specified quality : *as she grew older, she became a model of self-control* | [as adj.] *he was a model husband and father*.

- (**model for**) an actual person or place on which a specified fictional character or location is based : *the author denied that Marilyn was the model for his tragic heroine*.

3 a person, typically a woman, employed to display clothes by wearing them : *a fashion model*.

- a person employed to pose for an artist, photographer, or sculptor.

4 a particular design or version of a product : *trading your car in for a newer model*.

representation

representation |ˌreprɪzenˈtā sh ən; -zən-|

noun

1 the action of speaking or acting on behalf of someone or the state of being so represented : *asylum-seekers should be guaranteed good legal advice and representation.*

2 the description or portrayal of someone or something in a particular way or as being of a certain nature : *the representation of women in newspapers.*

- the depiction of someone or something in a picture or other work of art : *Picasso is striving for some absolute representation of reality.*
- a thing, esp. a picture or model, that depicts a likeness or reproduction of someone or something : *a striking representation of a vase of flowers.*
- (in some theories of perception) a mental state or concept regarded as corresponding to a thing perceived.

3 (**representations)** formal statements made to a higher authority, esp. so as to communicate an opinion or register a protest : *certain church groups are making strong representations to our government.*

- a statement or allegation : *any buyer was relying on a representation that the tapes were genuine.*

representation

representation |ˌreprɪzenˈtā sh ən; -zən-|

noun

1 the action of speaking or acting on behalf of someone or the state of being so represented : *asylum-seekers should be guaranteed good legal advice and representation.*

2 the **description or portrayal of** someone or **something in a particular way** or as being of a certain nature : *the representation of women in newspapers.*

- the depiction of someone or something in a picture or other work of art : *Picasso is striving for some absolute representation of reality.*
- a thing, esp. a picture or model, that depicts a likeness or reproduction of someone or something : *a striking representation of a vase of flowers.*
- (in some theories of perception) **a mental state or concept regarded as corresponding to a thing perceived.**

3 (representations) formal statements made to a higher authority, esp. so as to communicate an opinion or register a protest : *certain church groups are making strong representations to our government.*

- a statement or allegation : *any buyer was relying on a representation that the tapes were genuine.*

experience

experience |ik'spi(ə)rēəns|

noun

practical contact with and observation of facts or events : *he had already learned his lesson by painful experience* | *he spoke from experience.*

- the knowledge or skill acquired by such means over a period of time, esp. that gained in a particular profession by someone at work : *older men whose experience could be called upon* | *candidates with the necessary experience.*
- an event or occurrence that leaves an impression on someone : *for the younger players it has been a learning experience.*

verb [trans.]

encounter or undergo (an event or occurrence) : *the company is experiencing difficulties.*

- feel (an emotion) : *an opportunity to experience the excitement of New York.*

experience

experience |ik'spi(ə)rēəns|

noun

practical **contact with and observation of facts or events** : *he had already learned his lesson by painful experience* | *he spoke from experience.*

- the knowledge or skill acquired by such means over a period of time, esp. that **gained in a particular profession by someone at work** : *older men whose experience could be called upon* | *candidates with the necessary experience.*
- **an event or occurrence that leaves an impression** on someone : *for the younger players it has been a learning experience.*

verb [trans.]

encounter or undergo (an event or occurrence) : *the company is experiencing difficulties.*

- feel (an emotion) : *an opportunity to experience the excitement of New York.*

satisfaction

satisfaction |ˌsatisˈfak sh ən|

noun

fulfillment of one's wishes, expectations, or needs, or the pleasure derived from this : *he smiled with satisfaction* | *managing directors seeking greater job satisfaction.*

- Law the payment of a debt or fulfillment of an obligation or claim : *in **full and final satisfaction** of the claim.*
- [with negative] what is felt to be owed or due to one, esp. in reparation of an injustice or wrong : *the work will come to a halt if the electricity and telephone people don't **get satisfaction.***
- Christian Theology Christ's atonement for sin.
- historical the opportunity to defend one's honor in a duel : *I **demand** the **satisfaction** of a gentleman.*

satisfaction

satisfaction |ˌsatisˈfak sh ən|

noun

fulfillment of one's wishes, expectations, or needs, or the pleasure derived from this : *he smiled with satisfaction* | *managing directors seeking greater job satisfaction*.

- Law the payment of a debt or fulfillment of an obligation or claim : *in full and final satisfaction of the claim*.
- [with negative] what is felt to be owed or due to one, esp. in reparation of an injustice or wrong : *the work will come to a halt if the electricity and telephone people don't get satisfaction*.
- Christian Theology Christ's atonement for sin.
- historical the opportunity to defend one's honor in a duel : *I demand the satisfaction of a gentleman*.

SUCCESS

SUCCESS |sək'ses|

noun

the accomplishment of an aim or purpose : *the president had some **success in** restoring confidence.*

- the attainment of popularity or profit : *the success of his play.*
- a person or thing that achieves desired aims or attains prosperity : *I must make a success of my business.*
- archaic the outcome of an undertaking, specified as achieving or failing to achieve its aims : *the good or ill success of their maritime enterprises.*

SUCCESS

SUCCESS |sək'ses|

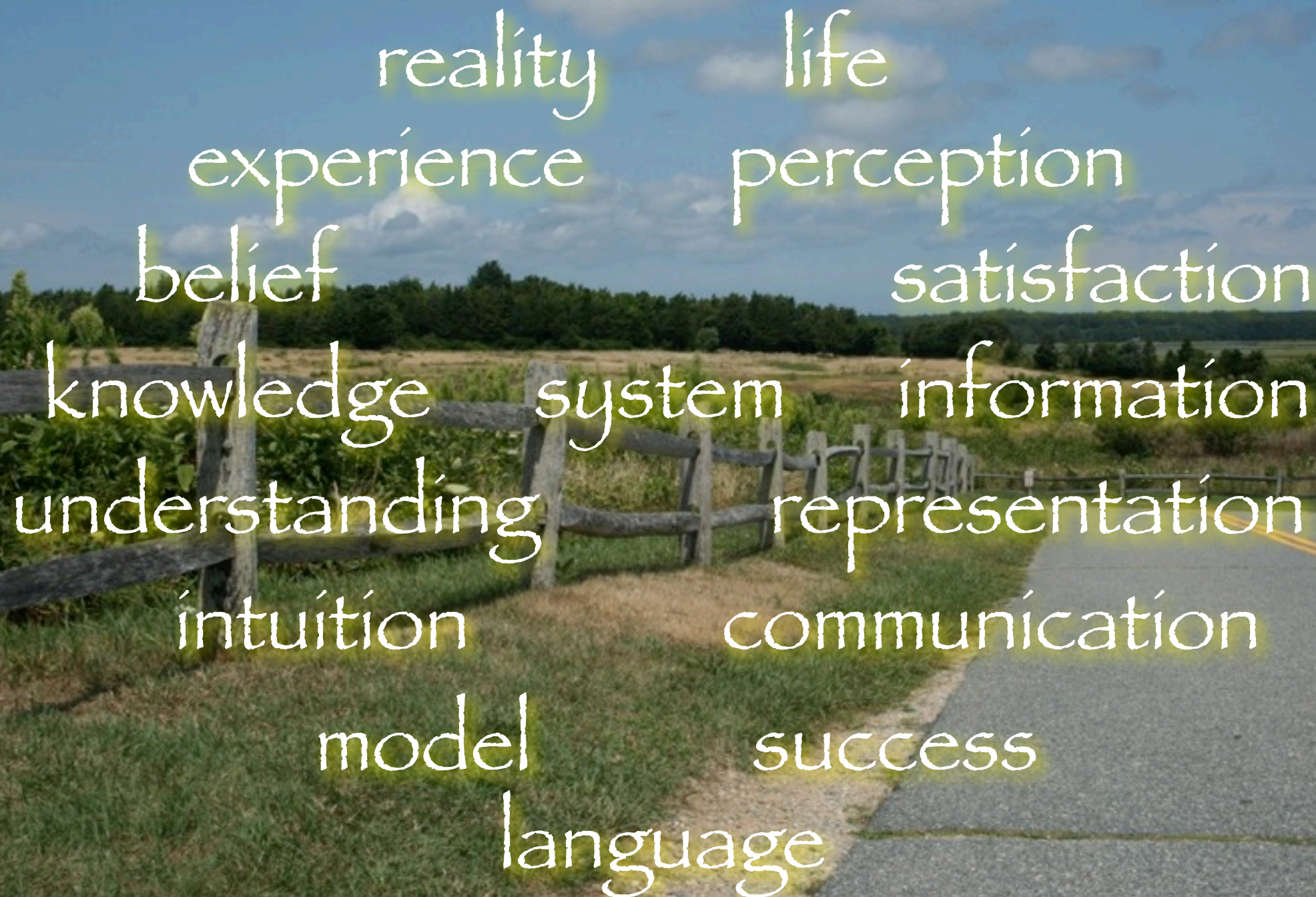
noun

the accomplishment of an aim or purpose : *the president had some **success** **in** restoring confidence.*

- the attainment of popularity or profit : *the success of his play.*
- a person or thing that **achieves desired aims** or attains prosperity : *I must make a success of my business.*
- archaic the outcome of an undertaking, specified as achieving or failing to achieve its aims : *the good or ill success of their maritime enterprises.*

What is a system?

- ◆ A system is a subset of the universe, some reality.
- ◆ The art of system modeling is choosing a subset of the universe.
- ◆ The art of good system modeling is choosing an appropriate subset of the universe.
- ◆ The art of design is accounting for everything in the subset.
- ◆ The art of good design is satisfactorily accounting for everything in the subset.
- ◆ The universe is composed of only two things: structure and behavior both of which are dynamic (i.e. behavior changes structure and structure enables behavior.)



reality life
experience perception
belief satisfaction
knowledge system information
understanding representation
intuition communication
model success
language