

CRMInfluence

A multi-causal ontology model - part of the CIDOC-CRM ontology family

DRAFT

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Background

Research into CRMInfluence was supported by the Andrew W. Mellon Foundation as part of the ResearchSpace project. The original impetus for this specialisation came from a practical art history project involving time based art. However, an obvious side question arose about how different artists over time had influenced each other in terms of a particular concept.¹

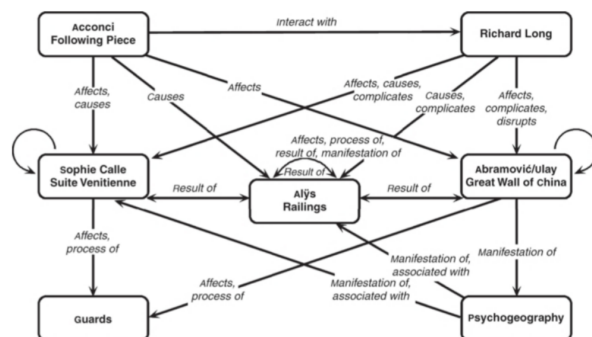


Figure 48. Relational knowledge sustained by different psychogeographic works of art.

For example, in the book, *Psychology of Contemporary Art*, the concept of a ‘knowledge map’ is used to represent the influences (causes) for interconnection. The author makes it clear that the “map uses the names of artists or performance works, not to explore the relationships between

*fixed perceptual cues but between different acts or routes of walking – not only walking as a physical action, but also as a series of performances, semantic connections that breach or connect particular psychological states... In this sense, the map is a map of the relations between artworks as well as the relations between mental states enacted by these performances.”*²

Another motivation was drawn from an extreme case in which historians were unable to align their work and which highlighted issues originating from social historians about causation, particularly the movement from a top down history based on the documents of those in power, and a new multi-causal approach which brought in different and varied social perspectives. The rise of ‘history from below’ in the last century resulted in some significant arguments for which the debate about the causes of the English Revolution highlighted. Walter Benjamin criticised what he called universal history which he said “has no theoretical armature. Its method is addictive; it musters a mass of data to fill the homogeneous, empty time”.³ Another historian points out that, “the task of the historian is not one of tracing a series of links in a temporal chain; rather, it is his task to analyze a complex pattern of change into the factors which served to make it precisely what it was”.⁴

CRMInfluence is designed to create an integrated network of what this reference calls, “weak causation”, but what this really means is that causation is a far more complex set of related processes that is often not fully represented in established historical accounts or which is scattered among disconnected textual monographs. It provides a means by which a far wider set of sources can highlight a wider range of influences, small or large, that have a bearing on, reveal, and challenge established history. These can then be transparently discussed and their relative importance considered, offering more branches of investigation that may be better pursued through an inclusive and collaborative semantic framework.

¹ Gregory Minissale, *The Psychology of Contemporary Art* (New York: Cambridge University Press, 2013), 326, <https://doi.org/10.1017/CBO9781139094313>. - citation for Figure 48

² Minissale, 328.

³ Walter Benjamin, ‘Theses on the Philosophy of History’, in *Illuminations*, New Ed edition (London: Pimlico, 1999), 254.

⁴ Mandelbaum, ‘A Note on History as Narrative’, 417.

It was also motivated by the significant issues discussed around social ontology within the CRM SIG and the problems of agreeing social theory concepts - again a clear issue in the English Revolution debate with social historians. The CIDOC CRM is an empirically based ontology and while knowledge generation is not exclusively an empirical endeavour, the basis and validity of the CIDOC CRM is itself based on an empirical footing concerning particulars and “microhistory” to support wider generalisations.⁵ Korzynski’s second rule of language is described as follows;⁶ “If you wish to align language with the world, it must have relevance with respect to the part of reality to which it refers, and this can only be achieved through empirical findings. Without this empirical linkage, language cannot be adequately orientated with reality and can often result in errors and numerous adjustments.”⁷ The CIDOC CRM provides the empirical semantic patterns on which interpretations and explanations can be derived from and has a mechanism for this through CRMInf, an argumentation extension of the CIDOC CRM.

CRMInfluence acknowledges social influence but from the perspective of its framework - the observable influence over individuals or groups of directly interacting individuals. The empirical process is in the observable behaviour of individuals flowing from their mental state which is evidenced through what they do and say. It does not dismiss structural social elements but maintains a clear and transparent ontological commitment - the basis for the CIDOC CRMs form of knowledge representation.

The historian E.P. Thompson illustrates the problem by saying,

*“...one is in danger of becoming the slave of one’s own categories. Sociologists who have stopped the time-machine and, with a good deal of conceptual huffing and puffing, have gone down to the engine-room to look, tell us that nowhere at all have they been able to locate and classify a class. They can only find a multitude of people with different occupations, incomes, status-hierarchies, and the rest. Of course they are right, since class is not this or that part of the machine, but the way the machine works once it is set in motion—not this interest and that interest, but the friction of interests—the movement itself, the heat, the thundering noise. Class is a social and cultural formation (often finding institutional expression) which cannot be defined abstractly, or in isolation, but only in terms of relationship with other classes; and, ultimately, the definition can only be made in the medium of time—that is, action and reaction, change and conflict”.*⁸

CRMInfluence strengthens the CIDOC CRM’s ability to trace the provenance of knowledge through patterns of influence that build over time. These causal aspects of networks lend themselves to the ability of the CIDOC CRM to help compare and resolve conflicts or contradictions as an ongoing

⁵ Again, it is not the intention to avoid complex social concepts generally, only to keep within the constraints of the CIDOC CRM ontology to maintain universal integrity. Further than this the historian Eric Hobsbawm said that if history did not generalise then it was pointless, although we should also be aware of “unlikeness”.

⁶ Alfred Korzybski, *Science and Sanity: An Introduction to Non-Aristotelian Systems and General Semantics*, 1st ed, International Non-Aristotelian Library (New York, Lancaster, Pa.: International Non-Aristotelian Library Pub. Co. ; Science Press Printing Co., distributors, 1933), 751.

⁷ Slawomir Pasikowski, ‘Gregory Bateson’s Cybernetic Methodology: The Ecosystem Approach in Empirical Research: Batesonian Legacy Continued’, in *Towards an Ecology of Mind: Batesonian Legacy Continued (63-84)*, ed. N Bateson and M Jaworska-Witkowska, 2017, 67.

⁸ E. P. Thompson, ‘The Peculiarities Of The English’, *Socialist Register* 2 (19 March 1965), <https://socialistregister.com/index.php/srv/article/view/5963>.

community activity, by looking at the significance of different types of influence and their relative evidential strength. Different influences may be apparent over short periods of history, but are always part of a *longue durée* and have global effect. Short history and long history, operating over different spatial areas, are not independent of each other, and exist simply as history. CRMInfluence provides a significant new dimension to the CRM's community knowledge building agenda and addresses the problem of static abstract history, with dynamic, non-linear, interconnected history. CRMInfluence can tie together different historical investigations using causal threads providing an important role in the intellectual aspects of digital historical research.

We hope that CRMInfluence will provide a means to represent what Thompson called "movement" and the "friction of interests" which operate within a particular social context. The ideas, events, communications, and thought processes, manifest in the productive forces of actors, can be represented through observable influence from different directions from which stronger societal conclusions can be derived. For example, the current investigation by the United States House Select Committee on the January 6 Attack is tasked to "investigate and report upon the facts, circumstances, and causes relating to January 6, 2021."⁹ Despite a media focus on particular actors within a particular bubble, such an investigation into causes is highly complex and would ideally include influences that have a significantly longer historical backdrop. Additionally, the multiple historical causes connected to this event will have resonance in other parts of the world and which are part of the same societal network. As such the ability to capture and expand networks of influence provides the basis for both qualitative and quantitative historical work (also dialectically interconnected) needed to make sense within our current socio-economic, political and ecological environment .

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⁹ 'About', Select Committee to Investigate the January 6th Attack on the United States Capitol, 19 December 2013, <https://january6th.house.gov/about>.

Introduction

In this document *influence* is a concept of weak causality - but not in the negative sense¹⁰: Something a human encountered (“the *source*”) has contributed to something they did or thought afterwards (“the *effect*”), in a way that a *justified* scholarly argument may make it *plausible* that the following “something” would have been different without this influence. In practice a plausible argument is likely to include multiple and related influences (a complex network of simultaneous, overlapping or sequential influences). The key aspect of this specialisation is that the focus of influence is on distinguishable human behaviour and products that can be attributed to distinct factors. In doing so it avoids the difficulties of defining a detailed social ontology while not dismissing systemic and social factors. It therefore maintains the empirical approach of the CIDOC CRM.

No particular theory of knowledge is employed, and the ontology does not deal with the degree that behaviour and products are determined by the environment and social structures - although it may support epistemological arguments along those lines. It models any sort of “causation” as “influence”. The source of the influence, i.e. the conditions, events, things, systems or ideas encountered, and the alleged reaction to the influence flowing into an actor is, for these purposes, the observable/ evidential focus.

Therefore the vantage point of *influence* is a mental attitude connected to a particular prominent background environment, experience or thought with some evident distinct forms of behaviour or individual activities, products or uttered thoughts and opinions thereafter. Influence may also have negative effects: to avoid kinds of activities, not to do or use something.

Let us first consider influence on an individual human, in contrast to a social collective:

We can distinguish the following forms of *sources* of influence:

- A) Positive external sources, isolated:
 1. An individual experience in the form of an event: being witness of, being involved, being materially (bodily, economically) affected, being nearly affected, being socially affected in reputation, relations or rights.
 2. An individual intellectual experience in the form of encountering an object or feature with properties that leave a particular impression, such as an artwork, a book or other human-made things or pieces from nature (the experience is event mediated, but the effect can be compared with a persistent item)
- B) Positive continued external source:
 3. A continued experience of type (1) above, such as “bullying”.
 4. An extended encounter with characteristic *kinds* of objects, such as Aboriginal artwork or Ukiyo-e.

¹⁰ The term “weak causality” is defined as a philosophical stance that there are no distinct causes that can be separated clearly from the context, and that whatever we regard as the cause is not the isolated thing that makes future happen in a deterministic way. Rather, the only objective statement we can make is that all the environment contributes to how things occur, and that any difference in the environment results basically in another future. Therefore we can only argue about the strength of influence of factors that stand out against a background of more accidental or less varied environmental factors. I take the example of the soldier obeying the order to show that not even such a strong “cause” (“he caused me doing it”) is more than an influence. I mean “weak” in a logical sense, not that there are “strong causes” as opposed to “influence” at all.

5. Communication with a human partner about ideas, opinions, convictions, selected knowledge of relevance, reasoning forms (could be isolated, one meeting, see (1), but typically extended. Evidence would come from other products of the partner, or letters, minutes, recordings).
 6. An encounter with particular ideas and opinions or characteristics of a social collective or culture, such as the Japanese "amae", a fascist movement or Gandhi's non-violent resistance, by direct experience. (learning about it falls under (3) above).
 7. Environmental conditions and phenomena, such as droughts, floods, local climate improvements, access to raw materials.
 8. Social conditions, whether economic, political or affected by other social systems.
- C) Internal sources:
9. An intellectual insight, in particular combining other influences.
 10. A vision or a dream.
 11. A bad health condition, a severe disease.
- D) Change of situations and negative (i.e., lacking) External Sources
12. Change of work or profession, be it independent or via employment or without economic compensation.
 13. Change of social environment and status, family situation, political environment, up to conditions of unrest and war
 14. Change of economic situation, in particular loss of income, loss of social security, but also positive, becoming economically independent.

The effects of an influence may be limited after an encounter with the source, extended, or for the rest of a life-time.

We can distinguish the following evident effects of an influence:

1. Carrying out (having the initiative for) a particular action.
2. Shaping an activity in a characteristic way.
3. Avoiding a kind of situation.
4. Producing a certain thing (see (1), the evidence is in the result).
5. Producing a certain thing in a characteristic way (see (2)).
6. Continuing (1)-(5).
7. Developing certain convictions, opinions, reasoning forms (possibly promoting, teaching, see (1),(2),(4)-(6)).
8. Using certain forms of reasoning.

Values associated:

1. Personal utility, improving (living conditions), altruism (including spread of knowledge), effective and easy to do, desirable, aesthetic appreciated and making pleasure,
2. Altruistic utility as under (1) above, ethical.
3. Fear: dangerous, risky, undesirable, unpleasant, unethical, sinful, guilty.

Modelling considerations:

In modelling, we ignore the fact that values (ethical, social, etc) themselves may emerge under influence, because we can take them to be possibly the result of previous, more long-term influences. See “radicalization scenarios” as a counterexample, in which actions and values are simultaneously imparted. Even in that case, there is a personal evaluation in place, be it itself a result of the broader influence.

For event-based influence, the time-span and place of influence is clear. For extended exposure, in particular environmental, we need a time-span and place of exposure, possibly a holiday, a professional stay, etc.. The place does not make much sense if it is from reading books. For communications with a partner, place may not be much relevant, but that of the individual meetings.

For the effect, there may be a time-span of the influence being evident or reported by the individual. It may or may not end within the life-time. The influence is in the mind of the individual. We can either model it as such, and link its manifestations as “evidence” to the influence, or we attribute it directly to the activity, as in the CRM.

The CRM base provides a property, *P15 was influenced by*, that connects the influencing phenomena directly with the activities of the influenced actor that provide evidence of that influence on that actor. CRMinfluence models influences as an acquired attitude of individuals. If we use both modelling paradigms and link them to the individual and in parallel to the events and products of evidence, this individual must be an actor of the respective events . If we link the source of influence directly to the evidence-providing activity , there may be ambiguity whose influence it was in case of multiple individuals involved.

If an individual has avoided activities rather than doing them, there is only a general description of the effect possible. In order to model such effects, it may be necessary to break the associated concepts up into more distinct classes. There would be too much variability in the pattern.

Influence on collective actors:

As a first idea, let us consider a Group in the sense of the CRM, which can act as an individual, in contrast to a mass limited by parameters. Then evidence may just be sought in their common or representative activities and products. However, in order to argue about an influence common to identifiable collectives of people we should exclude groups which are led by representatives, such as large enterprises, institutions and nations. We have to assume that groups capable of acting as an individual under the same identifiable individual influence have a sort of shared understanding prior to acting by definition, broadly a shared mental attitude. Such shared understanding should normally be the result of communication among its members, characteristic for teams, and generally limiting the size of participants.

For a mass of people, certain professions or religious confessions, social classes, we need to take a rather statistical stance, which is not part of the model, in which influence is an interpretation of a potential based on varied evidence from individuals or clearly collaborating groups. The model presented here

aims at providing the empirical base and the means to document the necessary provenance of knowledge for arguing at such a collective level without falling into the traps of hidden epistemological biases of statistical arguments, well-described in respective literature, not to talk about intentional distortion of reality. To provide this differentiation a new class, E76 Communicative Group is created which creates the necessary specialisation. For the time being, we use E76 Communicative Group OR E21 Person as the range of the respective properties. A tentative “Communicative Actor” class may be introduced later to replace this construct adequately.

Property Table

Property	Property name	Domain	Range
SP50	has influenced (was influenced by)	S030 Influence	E21 Person, E76 Communicative Group
SP51	was manifest in (incorporated)	S030 Influence	E7 Activity
SP52	led to avoiding (was avoided through)	S030 Influence	EO1 Situation Type
SP53	was apparent during (was associated with)	S030 Influence	E52 Time-Span
SP70	is represented by (is representational of)	S030 Influence	E70_Thing
SP54	was specifically induced by (specifically induced)	S031 Individual Influence	E5 Event
SP55	induced by encounter with (encounter with motivated)	S031 Individual Influence	E70 Thing
SP56	was exerted by (exerted)	S032 Communicative Influence	E76 Communicative Group, E21 Person
SP57	was exerted during (was time-span of)	S032 Communicative Influence	E52 Time-Span
SP58	was exerted by (was period of)	S033 Societal Influence	E4 Period
SP59	was exerted during (was time-span of)	S033 Societal Influence	E52 Time-Span
SP60	by the idea (idea formed)	S033 Societal Influence	E28 Conceptual Object
SP61	had contribution (contributed to)	S033 Societal Influence	E5 Event
SP62	was exerted by (produced)	S034 Inner Influence	E73 Information Object
SP63	was exerted during (was time-span of)	S034 Inner Influence	E52 Time-Span
SP64	was exerted by (generated)	S035 Environmental Influence	S036 Observable Situation
SP65	was experienced at (was location of)	S035 Environmental Influence	E53 Place
SP66	was experienced during (was period of)	S035 Environmental Influence	E4 Period
SP67	was contributed to by (contributed to)	S035 Environmental Influence	E5 Event

Hierarchy**E74_Group****E76_Communicative_Group****E2 Temporal Entity****SO36 Observable Situation****MO1 Mental Attitude****S30 Influence****SO32 Communicative Influence****SO34 Inner Influence****SO33 Societal Influence****SO35 Environmental Influence****E55 Type****EO1 Situation Type****EO2 Event Pattern**

Classes and Properties

Class: Exxx Communicative Group

Subclass of: E74 Group

Scope note:

A Communicative Group is one made up of two or more individuals who act collectively and have underlying and discernable lines of communication around a specific subject(s). Individual members of the group have mental attitudes which are similar, overlap or can be synthesised such that they underpin common activities and objectives. These lines of communication may be formal or informal but are based on a common interest. For example, a board of directors is a communicative group but the company as a whole does not have sufficient coherency of communication and interest (directors, managers, shareholders, employees etc) to qualify as a communicative group and would be generalised to E74 Group. An informal example would include a group formed around a particular issue, for example, a political demonstration, will have sufficient lines of communication around the issue at hand to be acting as a communicative group and which causes them to demonstrate, despite differences in the specifics of their mental attitudes.

Class: SO36 Observable Situation

Subclass of: E2 Temporal Entity

Scope note:

An Observable Situation can be perceived as the focus of an observer, by human senses or enhanced or mediated by technical instruments, on a constellation, an interaction or a dynamic behaviour of instances of S15 Observable Entity or sections of these instances within a particular time-span and spatial extent in the past. The observer may themselves be directly involved, or be receiving respective signals from these instances. The focus of the observer determines the model they overlay on the observed reality in order to describe it in terms of distinct properties and value ranges of parameters. The latter selection and projection from reality constitutes the content of a particular observable situation. Multiple observers may select different models, details and value systems to the same spatiotemporal area (i.e., views they pay attention to). Consequently, the observed situations may differ, but should, in principle, be compatible with a common reality in the areas where they overlap.

(categorical) Examples:

- Sun rising over the horizon at a particular spot.
- A car passing by another car.
- A lightning.
- An air temperature and wind speed at a certain point and time.
- People being in a city, a house.
- Someone showing symptoms of sickness.

- A vegetation cover of a field.
- Someone eating.
- Two mountains situated at a certain distance.
- Cars in a starting position for a race.
- The direction a compass needle shows at a particular spot.

Class: MO1 Mental Attitude (this was a tentative class for CRMsoc)

Subclass of: E2 Temporal Entity

Scope note:

This class comprises the conscious maintenance of an intellectual attitude towards matters of knowing, believing or guiding actions and reactions to social and other environmental situations, such as, besides others, beliefs about laws governing nature or intentions to carry out actions. An instance of MO2 Mental Attitude is individual **to a human being** and specific to a particular, explicit matter. Individuals in a sustained mutual relationship may temporarily share a mental attitude about a particular matter sufficiently similar to be regarded having an identical common core.

Class: SO30 Influence

Subclass of: MO2 Mental Attitude

Scope note: This class comprises mental attitudes of an individual or collective group guiding their opinions and activities in reaction to and taking up characteristic properties of things, ideas, situations or phenomena encountered either positively for using or following them, or negatively for avoiding them. In case of ideas, they may even be a product of one's own reasoning processes or imagination, even dreams. Things may be information, ideas, or material items. Phenomena include interactions and communications with people, but also physical experiences. The actor may be an individual person or an Exxx Communicative Group acting collectively under the impression of shared experiences and/or after forming shared opinions. It may not be a set of people distinguished within a society by common characteristics, such as "politicians" "working class" etc. Concepts of influence on the latter should rather be regarded as statistical correlations within a particular period.

Properties

SP50 has influenced (was influenced by)

Domain: S030 Influence

Range: Exxx Communicative Group

E21 Person

Scope note: this property associates an instance of SO30 Influence with the subject being under influence.

SP51 was manifest in (incorporated)**Domain:** S030 Influence**Range:** E7 Activity**Scope note:** this property associates an instance of SO 30 Influence with an activity of the subject that can be taken as evidence of the influence.

e.g. the production of some artefact or organising a meeting

SP52 led to avoiding (was avoided through)**Domain:** S030 Influence**Range:** EO1 Situation Type**Scope note:** this property associates an instance of SO 30 Influence with kinds of situations the subject is avoiding under this influence.

e.g. the avoidance of travel, or an encounter

SP53 was apparent during (was associated with)**Domain:** S030 Influence**Range:** E52 Time-Span**Scope note:** this property associates an instance of SO 30 Influence with the time-span the influence was apparent by the behaviour of the subject or reported to be relevant by the subject.**SP70 is represented by (is representational of)****Domain:** S030 Influence**Range:** E70_Thing**Scope note:** this property associates an instance of SO 30 Influence with the time-span the influence was apparent by the behaviour of the subject or reported to be relevant by the subject.**Class: SO31 Individual Influence****Subclass of: SO30 Influence****Scope note:** This class comprises influence on an actor guiding their opinions and activities in reaction to and typically taking up characteristic properties of an individual, identifiable physical thing, information

or event encountered, or avoiding characteristic things. The influence should either be evident by a justifiable similarity with the encountered phenomena or be explicitly witnessed by the influenced actor themselves.

Properties

SP54 was specifically induced by (specifically induced)

Domain: SO31 Individual Influence

Range: E5 Event

Scope note: this property associates an instance of SO 31 Individual Influence with an individual instance of E5 Event that constitutes the influential source.

SP55 induced by encounter with (encounter_with_motivated)

Domain: SO31 Individual Influence

Range: E70 Thing

Scope note: this property associates an instance of SO 31 Individual Influence with an individual instance of E70 Thing encountered once or repeatedly by the subject that constitutes the influential source.

Examples: Winkelmann's opinion about classical Greek art *induced by encounter with* the [Laocoön Group](#) in Rome.

Martin Luther's resolve to become a monk *induced by encounter with* a close-by lightning stroke.

https://en.wikipedia.org/wiki/Martin_Luther: "On 2 July 1505, while returning to university on horseback after a trip home, a lightning bolt struck near Martin Luther during a thunderstorm. Later telling his father he was terrified of death and divine judgement, he cried out, "Help! [Saint Anna](#), I will become a monk!"^{[21][22]} He came to view his cry for help as a vow he could never break. He left university, sold his books, and entered [St. Augustine's Monastery](#) in [Erfurt](#) on 17 July 1505.^[23]"

Class: SO32 Communicative Influence

Subclass of: SO30 Influence

Scope note: This class comprises influence on an actor guiding their opinions and activities in reaction to and taking up ideas and lived practice and behaviour from a person or group in the context of close extended communication and/or living together for some time. The influence should either be evident by a justifiable similarity with the behaviour of the influencing actor or be explicitly witnessed by the influenced actor themselves.

SP56 was exerted by (exerted)

Domain: SO32 Communicative Influence

Range: Exxx Communicative Group, E21 Person

Scope note: this property associates an instance of SO 32 Communicative Influence with an actor whose ideas, teachings or behaviour experienced by the subject constitute the influential source.

SP57 was exerted during (was time-span of)

Domain: SO32 Communicative Influence

Range: E52 Time-Span

Scope note: this property associates an instance of SO 32 Communicative Influence with the Time-Span during which the subject experienced the influencing actor in a relevant way, such as a teaching period.

Example: (https://en.wikipedia.org/wiki/Martin_Luther) “In accordance with his father's wishes, he (Martin Luther) enrolled in law but dropped out almost immediately, believing that law represented uncertainty.^[19] Luther sought assurances about life and was drawn to theology and philosophy, expressing particular interest in [Aristotle](#), [William of Ockham](#), and [Gabriel Biel](#).^[19] **He was deeply influenced by two tutors, [Bartholomaeus Arnoldi von Usingen](#) and [Jodocus Trutfetter](#)**, who taught him to be suspicious of even the greatest thinkers^[19] and to test everything himself by experience.^[20]”

Class: SO33 Societal Influence

Subclass of: SO30 Influence

Scope note: This class comprises influence on an actor guiding their opinions and activities in reaction to and taking up general ideas, lived practices and behaviour from a social context the influenced actor is part of or has lived in for some time. The influential ideas may come from any sources extant in this environment, be it being discussed publicly by any social group or class or expressed and published by multiple individuals. Influential ideas may be explicitly formulated in the respective society or be a more abstract tendency, philosophical background or common pattern. The influence should either be evident by a justifiable similarity with the ideas and behaviour of the influencing society or be explicitly witnessed by the influenced actors themselves. Instances of SO33 Societal Influence are used to document an overall effect, and should be documented separately from multiple identifiable individual encounters of an actor contributing to it.

Properties

SP58 was exerted by (was period of)

Domain: SO33 Societal Influence

Range: E4 Period

Scope note: this property associates an instance of SO 33 Societal Influence with the instance of E4 Period that constitutes the influencing society or societal movement, such as Impressionism or the former Tibetan theocracy.

SP59 was exerted during (was time-span of)**Domain:** SO33 Societal Influence**Range:** E52 Time-Span**Scope note:** this property associates an instance of SO 33 Societal Influence with the Time-Span during which the subject was exposed to the influencing societal phenomena in a relevant way, such as the time-span of living under an oppressing certain regime before fleeing it.**SP60 by the idea (idea formed)****Domain:** SO33 Societal Influence**Range:** E28 Conceptual Object**Scope note:** this property associates an instance of SO 33 Societal Influence with the instance of E28 Conceptual Object that constitutes the particularly influencing ideas within the influencing society or societal movement, such as Materialism in 19th century England or Anarchism in Catalonia.**SP61 had contribution (contributed to)****Domain:** SO33 Societal Influence**Range:** E5 Event**Scope note:** this property associates an instance of SO 33 Societal Influence with the instance of E5 Event that particularly contributed to the societal influence on the subject, such as a public demonstration, declaration of a manifesto or publishing of a book.**Examples:** Martin Heidegger becoming influenced by Nazism.

Albert Einstein going into exile to the US under Nazi racist threat.

Class: SO34 Inner Influence**Subclass of:** SO30 Influence**Scope note:** This class comprises influence on an actor guiding their opinions and activities in reaction to the result of a distinct intellectual reasoning process of their own or an emotional or spiritual experience that cannot be identified with a transfer of knowledge or a material event external to the actor. The influence should explicitly be witnessed by the influenced actor themselves.

The event itself may be described in some form of documentation by the property SP62 and/or by P3_has_note.

Properties

SP62 witness was documented in or by (documents witness of)

Domain: SO34 Inner Influence

Range: E73 Information Object

Scope note:

Example: Documentation of Buddha's enlightenment.

SP63 was exerted during (was time-span of)

Domain: SO34 Inner Influence

Range: E52 Time-Span

Scope note:

Example: Buddha's enlightenment. Galileo's insight that Earth is moving.

Class: SO35 Environmental Influence

Subclass of: SO30 Influence

Scope note: This class comprises influence on an actor guiding their opinions and activities in reaction to material environmental conditions and their understanding of their dynamics and methods of control, modification or protection from it. The influence should either be evident by the interaction of the actor with their environment or be explicitly witnessed by the influenced actor themselves. Instances of SO35 Environmental Influence are used to document an overall effect, and should be documented separately from multiple identifiable individual encounters of an actor contributing to it.

Properties

SP64 was exerted by (generated)

Domain: SO35 Environmental Influence

Range: Observable Situation

Scope note: this property associates an instance of SO35 Environmental Influence with the instance of E2 Temporal Entity that constitutes the influencing material phenomenon, such as a drought period.

SP65 was experienced at (was location of)

Domain: SO35 Environmental Influence

Range: E53 Place

Scope note: this property associates an instance of SO 35 Environmental Influence with the specific place at which the subject experienced the influencing material phenomenon, such as experiencing the “Little Ice Age” in England.

SP66 was experienced during (was period of)

Domain: SO35 Environmental Influence

Range: E4 Period

Scope note: this property associates an instance of SO 35 Environmental Influence with the Time-Span during which the subject was exposed to the influencing environmental phenomena in a relevant way.

Examples: Sahel Zone drought displacing some particular people.

“Little Ice Age” impacts...

Ilopango eruption 536AD:

<https://www.smithsonianmag.com/science-nature/sixth-century-misery-tied-not-one-two-volcanic-eruptions-180955858/>, related to the plague in Constantinople.

SP67 was contributed to by (contributed to)

Domain: SO35 Environmental Influence

Range: E5 Event

Scope Note: this property associates an instance of E5 Event which was a contributory factor in the

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