

Michelangelo, the Duck and the Rabbit: Towards a Robust Account of Modes of Existence

Juan Felipe Miranda Medina & Marisol Cristel Galarza Flores

The concept of modes of existence of semiotic entities underlies (post)Greimasian semiotics, yet it seems to have received little attention. Modes of existence can be used in different senses. For Greimas, from the perspective of *narrative semiotics*, when Michelangelo first receives a block of marble and decides to sculpt the David, his intention is in a *virtual* mode; as Michelangelo progresses he ends up bringing the David into existence, and his intention comes to the *realized* mode. In Fontanille's *tensive semiotics*, however, modes of existence can have to do with how one can narrow or broaden the scope of our apprehension of the David as our eyes look at it in order to produce a meaningful experience. In this work, the perspectives of narrative and tensive semiotics are contrasted both theoretically and practically applying both to a number of examples. In order to identify all possible modes of existence and all the possibilities of transitioning from one to the other in the examples presented, we resort to the method of finite-state automata from computer science. In the end, we propose a robust narrative account of modes of existence that relies on narrative semiotics for its definition, but into which intent and apprehension from tensive semiotics can be integrated. This work calls for the need of establishing a syntax of modes of existence, since both Greimas and Fontanille construe them as being necessary to account for the production of signification.

Keywords: modes of existence, finite-state automata, Greimas, Fontanille, intentional action

*In every block of marble I see a statue
as plain as though it stood before me,
shaped and perfect in attitude and action.
I have only to hew away the rough walls
that imprison the lovely apparition
to reveal it to the other eyes as mine see it.*

Michelangelo (cited in Shaikh & Leonard-Amodeo, 2005, p. 75)

1. Introduction: Modes of existence... of what?

The *David*, a statue more than 5m tall, was sculpted by Michelangelo from a large piece of marble known as “The Giant”. The marble block had laid in oblivion for years after a failed attempt to sculpt it by two other artists (Tilmans, 2011). Michelangelo, however, taking advantage of his exceptional artistic competence, managed to *realize*¹ the existence of the David, to bring it forward from what appeared to be a spoiled block of marble. Michelangelo's own metaphor of “hewing away the walls” that imprisoned the David, points to a different mode of existence in which the *David* found itself prior to its sculpting: the *virtual* mode. While the concept of *modes of existence*

¹ Although the two modes, from a linguistic perspective, are usually referred to as *virtual* and *actualized*, naming the latter mode *realized* allows it to be conceptually coherent with Greimas's triad virtual/actualized/realized (see Section 2).

can certainly be applied to metaphysics (i.e., to what exists or could exist)² in this work it is applied to *semiotic entities*—e.g., to a language, a painting, a catchy song, or anything from which signification can be produced.

The theoretical examination of modes of existence this work undertakes is carried out from the standpoint of (post)Greimasian semiotics, developed most notably by Algirdas Julien Greimas and Jacques Fontanille. This work considers three main perspectives of modes of existence. In the first one, illustrated by the example of the block of marble and the statue of the *David*, two modes of existence are acknowledged: the *virtual*, which refers to a system comprising a number of possibilities, and the *realized*, which refers to the act of bringing into existence some of these possibilities by means of practice.³

The second perspective refers to the theory of *narrative semiotics* developed by Greimas (1987), which offers a different account of modes of existence which, as we suggest in Section 5, is coherent with theories of *intentional action*. The dynamics of narrative semiotics is best illustrated by the canonical schema of the *subject on a quest*, where the subject embarks on a quest for an object of desire, acquiring gifts and facing challenges in order to attain it (Greimas, 1987; Fontanille, 2006, p. 31). In this process the subject traverses three modes of existence—from *virtual*, to *actualized*, to *realized*. However, in order to account for passions and for the sensible aspect of subjectivity, Greimas and Fontanille (1991) would later introduce a fourth mode, the *potentialized*.

The third perspective comes from Fontanille's *tensive semiotics*, which although deeply grounded on narrative semiotics, is substantially different from the latter. Modes of existence in this case are conceived as modulations of presence, and formulated as variations in the levels of intent and apprehension by a subject. In so doing, Fontanille aims to advance a more comprehensive description of the interaction between sensible and cognitive aspects of meaning production compared to Greimas. This article takes *The Semiotics of Discourse* (2006) as the main reference for Fontanille's theory of modes of existence since it provides one of the most comprehensive accounts on this matter from the perspective of tensive semiotics, although several other of his writings have been considered (Fontanille, 2017a, 2017b, 2018; Fontanille & Zilberberg, 2017).

The purpose of this article is to invite the reader to a theoretical reflection on modes of existence in the scope of (post)Greimasian semiotics, but with a particular orientation towards intentional action—a specific case of which is interpretation. Section 2 presents Greimas's approach to modes of existence both from a linguistic and a narrative perspective; emphasizing modalities, competence and junction as concepts from which modes of existence can be formally defined. Section 3 addresses Fontanille's account of modes of existence from the outlook of three different definitions, formulated in terms of (1) the tensive correlation, (2) modalities, and (3) co-existence. We focus on the notion of ascending and descending trajectories, and by means of examples we point out what we believe are inconsistencies between these three definitions. In tandem with our presentation of modes of existence in Sections 2 and 3, we develop examples to clarify fundamental concepts and relevant issues. The examples that are addressed from the perspective of narrative semiotics are analyzed by means of a method specifically deployed in computer science to formalize syntax; namely, finite-state automata (FSA) using directed graphs (Hopcroft et al., 2006). This will set a common framework to study and compare rigorously the different definitions of

² In his *Metaphysics*, Aristotle already identified two modes of existence (*potentiality* and *actuality*) in his account of change which are equivalent to *virtual* and *actualized*. Moreover, Aristotle in fact illustrated the actualization of potentiality as a bronze statue taking form (Barnes, 1984; Cohen, 2020).

³ A classical example of the application of modes of existence to language is Saussure's distinction between *langue* (an abstract system composed of linguistic signs) and *parole* (the utterances produced by making use of this system) (Martin & Ringham, 2000).

modes of existence that we engage with.⁴ On this basis, in Section 4, we provide an account of modes of existence which we believe overcomes some of the limitations in the theories of Greimas and Fontanille.

2. Greimas: Modes of existence from the perspective of narrative semiotics

Greimas is one of the few semioticians to place modes of existence at the core of his semiotic theory (Fontanille, 2006). For Greimas, modes of existence can be understood from two different outlooks. The first one, which corresponds to the viewpoint of linguistics, acknowledges two different modes: *virtual* and *realized* (see footnote 1). The *virtual* refers to language as a system, that is, existence *in absentia*. The utterance, on the other hand, corresponds to the *realization* of possibilities present in the system through the act of enunciation—i.e., existence *in praesentia* (Martin & Ringham, 2000, p. 21). For example, from all possible word combinations that the English language allows, we can realize a few in the utterance *I love semiotics*. The second outlook, that of narrative semiotics, distinguishes between three modes of existence: the *virtual*, the *actualized* and the *realized*. In order to properly address the difference between these three modes, however, we must first discuss the relation between modes of existence and *modalities*, one of Greimas's most original contributions.

2.1. Modalities

In the relevant, sense, *modality* can be defined as “the modification of a predicate by a subject” (Greimas, 1987, p. 121), or as that which overdetermines basic statements or utterances (Marting & Ringham, 2000, p. 86). Modalities involve expressions such as *wanting*, *having to*, *ought*, *may*, etc. (ibid.). For example, consider the utterances in (1-3).

- (1) I dance salsa.
- (2) I know how to dance salsa.
- (3) I want to know how to dance salsa.

In this case, utterance (2) corresponds to utterance (1) modalized once, while (3) adds a modalization to (2) and is therefore (1) modalized twice. In addition, Greimas distinguishes between *utterances of doing*, which correspond to the function of *transformation*, and *utterances of state*, which correspond to the function of *junction*. *Junction* “is the relation that determines the ‘state’ of the subject with regard to any sort of object of value”, and it can take two values: conjoined or disjoined (Greimas, 1987, p. 123). In the utterance of state in (4) *Rose* corresponds to the subject, *John* to the object, and *loves* indicates that subject and object are conjoined. An example of a modalized version of this utterance would be the utterance in (5). Conversely, (6-7) are examples of utterances of doing, since riding a horse is an action and it therefore corresponds to transformation.

- (4) Rose loves John.
- (5) Rose wants to love John.

⁴ The kind of automata being used in this work is neither Turing machines, nor pushdown automata; but rather finite state automata that may taken to be deterministic or not deterministic. For a comprehensive overview of the method refer to Hopcroft et al. (2006), Singh (2019), Carroll & Long (1989) or Hollos & Hollos (2013).

- (6) Rose rode that horse.
- (7) Rose had to ride that horse.

Establishing a definite typology of modalities is a complex enterprise (Sulkunen & Törrönen, 1997) and is out of the scope of the present article. Greimas distinguishes between the following types of modalities, all arranged into groups of four and related by the four elementary combinations of the *semiotic square* (Greimas & Rastier, 1968) under the general form (i) *f-ing-to-do/be*, (ii) its opposite, *f-ing-not-to-do/be*, and the contradictory terms (iii) *not-f-ing-to-do/be*, and (iv) *not-f-ing-not-to-do/be*:

- *Veridictory* modalities: being, seeming, non-being, non-seeming.
- *Alethic* modalities: necessity (having-to-be), impossibility (having-not-to-be), contingency (not-having-to-be) and possibility (not-having-not-to-be).
- *Deontic* modalities: prescription (having-to-do), prohibition (having-not-to-do), optionality (not-having-to-do), permission (not-having-not-to-do)
- *Factitive* modalities: causing-to-do, causing-not-to-do, not-causing-to-do, not-causing-not-to-do.

As Greimas points out, “all naming [of specific modalities] is arbitrary, although it can be more or less semantically motivated” (Greimas, 1987, p. 129)—e.g., what is essential to the modality of necessity is not that it is named “necessity”, but rather its modalized definition as *having-to-be*.

2.2. The relation between modalities and modes of existence

Narrative semiotics requires three modes of existence (i.e., *virtual*, *actualized* and *realized*) “in order to describe accurately all possible kinds of junction between a Subject and an Object” (Martin & Ringham, 2000, p. 21).⁵ Before any junction has been specified, Subject and Object are in a *virtual* position respect to each other. When Subject and Object are conjoined (i.e., when junction has taken place) their position is *realized*, but when they are disjointed, their position is *actualized* (ibid.).

Table 1 shows the correspondence between modalities and modes of existence according to Greimas. The virtual mode of existence is specified by virtualizing modalities (having-to, wanting), the actualized mode by the actualizing modalities being-able and knowing, and *performance* by the realizing modalities causing-to-be (doing) and being. The virtual and actualized modes of existence correspond to the phase of developing the *competence* necessary for performance.

⁵ Here, and in further references, the terms *Subject* and *Object* are written in capital letters because they correspond to technical terms in Greimas’s narrative semiotics; specifically, to actants in the actantial narrative schema (see Section 2.3).

Table 1. Definition of modes of existence in terms of modalities according to Greimas (Greimas & Courtés, 1979/1990, p. 132)

modes of existence	Competence		Performance
	virtual	actualized	realized
<i>modalities:</i>	<i>virtualizing</i>	<i>actualizing</i>	<i>realizing</i>
exotactic:	having-to	being-able	causing-to-be
endotactic:	wanting	knowing	being

2.3. Competence and the actantial model

Greimasian narrative semiotics articulates the narrative schema (i.e., the sequencing of the narrative process towards or away from realization, which directly involves modes of existence) with the actantial model (i.e., the model that accounts for the sequencing in the form of abstract entities called *actants*). Actants “are the forces and roles necessary for the accomplishment of a process” of action and/or signification (e.g., the characters of a plot, the nominal syntagms of a sentence, or the actors and roles of a play) (Fontanille, 2006, p. 95). The actantial model is composed of three pairs of actants: Sender/Receiver, Subject/Object and Helper/Opponent (Greimas & Courtés, 1979/1990, p. 24; Hébert, 2006a).

Though there are many canonical narrative schemas (Fontanille, 2006, p. 71), the most representative one, and the one that best fits the process of intentional action, is the *subject on a quest*. In this schema, a *Sender manipulates* a *Receiver* into engaging in a quest for an *Object* of value. Manipulation can take a number of forms depending on the narrative: seduction, persuasion, argumentation, blackmailing, etc. The Receiver accepts the Sender’s request by signing a contract where the Object of value is agreed upon (in intentional action the Object corresponds to the intention itself), and thus the Receiver becomes a *Subject* on a quest for an Object (or equivalently a Subject with an intention of action), acquiring the *virtualizing* modalities (having-to-do and/or wanting-to-do). It is fundamental to understand that *realization*—i.e., the Subject becoming conjoined with the Object—does not depend exclusively on the Subject’s performance, but is ultimately determined by the sanction of the Sender. This results in the following three fundamental features of competence (Miranda Medina, 2020, p. 2):

1. Competence “implies that a competent Subject *S* possesses certain *characteristics* (e.g., adequacy, knowledge, skill or capacity), or that the Subject is *capable of performing* certain tasks”, which is expressible in terms of the modalities being-able-to-do and knowing-how-to-do (Section 2.2, Table 1).
2. *Competence requires sanction*, that is, it requires that a transcendent entity that is outside of the action process itself (the Sender) confirms that *S* possesses those characteristics, or that *S* performed the task as required.
3. The characteristics or the performance that allow the sanction *S is competent* are not universal, but rather specific to a situation or narrative.

In terms of intentional action, this means that intention is not only present as a motivation at the beginning of the action/narrative process (*virtualization*), but it rather follows through the whole

process: it determines what sort of competence is relevant, and it is the measure to judge if the action was successful or not—this topic is re-examined in greater depth in Section 4.1.

2.4. Passions and the potentialized mode of existence

Greimas and Fontanille coauthored *The Semiotics of Passions* (1991), a seminal book which would extend the reach of narrative semiotics to account for passions such as greed, jealousy or envy. As before, the formulation of these passions relies on states of conjunction/disjunction between a Subject and an Object, though Subject-Subject relations play a paramount role. Both kinds of relations may now be associated to the pathemic states of euphoria or disphoria (e.g., liking/disliking, enjoying/suffering). However, the passionate Subject is now capable of undergoing these states not only by taking part in conjunctions and disjunctions, but rather by imagining them, or, using the technical term, by running *simulacra*. Jealousy, for example, consists of a jealous lover that imagines with suffering the scene of someone else securing the love of their paramour. Technically, the jealous Subject *S1* runs a simulacrum of a narrative sequence where another Subject *S2* becomes conjoined with the love of *X*, which introduces a state of disphoria in *S1*.

But what has this to do with modes of existence? Greimas and Fontanille calculated that there should exist a *potentialized* mode (ibid., pp. 123–124), as shown in Figure 1, and they attributed to it, though not without speculation, the Subject’s “passional disposition”, that is, its faculty to run simulacra. They determined that this new mode ought to lie between competence and performance (i.e., between the actualized and realized modes). On this account, the ordered sequence of modes of existence would be: *virtualized* >> *actualized* >> *potentialized* >> *realized*.

In our view, it is never clear why the junction function is assumed to take four possible values, instead of two or three. In other words, why should not-conjoined be different from disjoined, and conversely, not-disjoined be different from conjoined? The definition of the opposition conjoined–disjoined seems to be rather obscure, and apparently Fontanille himself was not satisfied with this formulation since, as we shall see in Section 3, in his later semiotics he redefines the potentialized mode both in its utility and in its position in the ordered sequence.

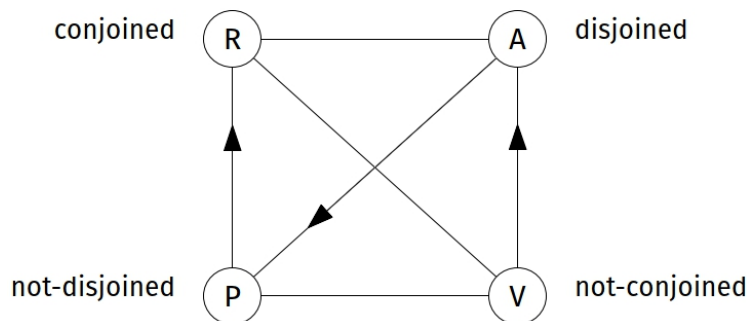


Figure 1. Semiotic square representing the relation between conjunction/disjunction and modes of existence (R: realized, A: actualized, P: potentialized, V: virtualized) as expounded in the *Semiotics of Passions* (Greimas & Fontanille, 1991, pp. 39, 48, 118)

2.5. Key points on modes of existence according to Greimas

The following key points will be relevant to work out the examples that follow and to understand the robust account on modes of existence presented in Section 4.2:

- A. *Performance presupposes competence* (Greimas, 1987, p. 132), which means that Subject and Object can only be in the *realized* mode passing first through the *actualized* mode. In other words, actualization implies meeting all conditions necessary for performance in the form of being-able-to-do and/or knowing-how-to-do.
- B. *Exotactic* modalities relate different subjects while *endotactic* modalities relate identical or syncretic subjects (Greimas & Courtés, 1969/1990, p. 263). This distinction is important, because relying on §A, and referring specifically to actualization, we have that being-able-to-do refers to any external conditions that enable the Subject to perform, while knowing-how-to-do refers to the conditions intrinsic to the Subject that enable it to perform. For example, if James can dance tap but only with his tap shoes on, then James already possesses the knowing-how-to-do, but the tap shoes constitute the being-able-to-do in the case of dancing. In fairy tales, the being-able-to-do is typically provided by gods or fairies that endow the Subject on a quest with gifts.
- C. The Subject and the Object mutually define each other. For Greimas, there can be no Subject without an Object, nor an Object without a Subject.
- D. The Object functions as a determination of the Subject, regardless of the position they hold in terms of modes of existence. Whether it is the case that Rose is a good dancer or that Rose wants to be a good dancer, being-a-good-dancer determines Rose as a Subject. Were it not for this predicate we would know nothing about Rose in this example.
- E. *Realization*, i.e., the conjunction between Subject and Object, is mediated by performance. Performance is in most cases not an end in itself, but rather what the Subject does in order to become conjoined with the Object of value. For example, when you say that you want to buy a car, buying is not actually what you desire. If it turns out that the car is faulty, you will most likely feel unsatisfied because what you actually wanted was to own a car that works, and buying was the *performance* required from your part in order to realize your intention.
- F. The fact that §E: realization is mediated by performance, and that §A: performance presupposes competence, implies that the Subject requires a *strategy* in order to achieve junction with the Object. That is, the Subject first has to determine what sort of performance is required to bring about this junction, and what are the preconditions in order to be able to perform. The acting Subject is thus faced with a set of possibilities *determined* by the intention or Object of desire.
- G. Competence requires sanction, and it is therefore ultimately the Sender (i.e., the intention) that in sanctioning determines if the Subject and the Object become *realized* or not.
- H. There is a congruence between Greimas's linguistic and narrative accounts of modes of existence. The *virtual* in the linguistic sense constitutes a system governed by certain rules that allows a *determined* set of possibilities—i.e., it allows some possibilities and excludes others. In virtue of §F, the Subject that is in a *virtual* position respect to its Object has a set of possibilities in front of itself determined by what the Object is, and what sort of performance is required to become conjoined with it.

The examples presented in the following subsection will illustrate these points better, as well as the deployment of the finite-state automata (FSA) method.

2.6. Example I: Mate in two

Before any piece is played, an estimate of ten to the power of hundred and twenty three different games are possible in the game of chess. The number of possible games, however, narrows down with every play as the game in question progresses. Imagine Jane and Mary playing chess. At first

the match is close and the competition fierce, but there comes a point where Jane correctly notices that she can execute a mate in two moves. In spite of her insight, Jane must be cautious: making the wrong move can imply delaying the mate, or, in the worst case, missing the chance to mate thus loosing the game. These possibilities are summarized in the graph using the FSA method as shown in Figure 2.

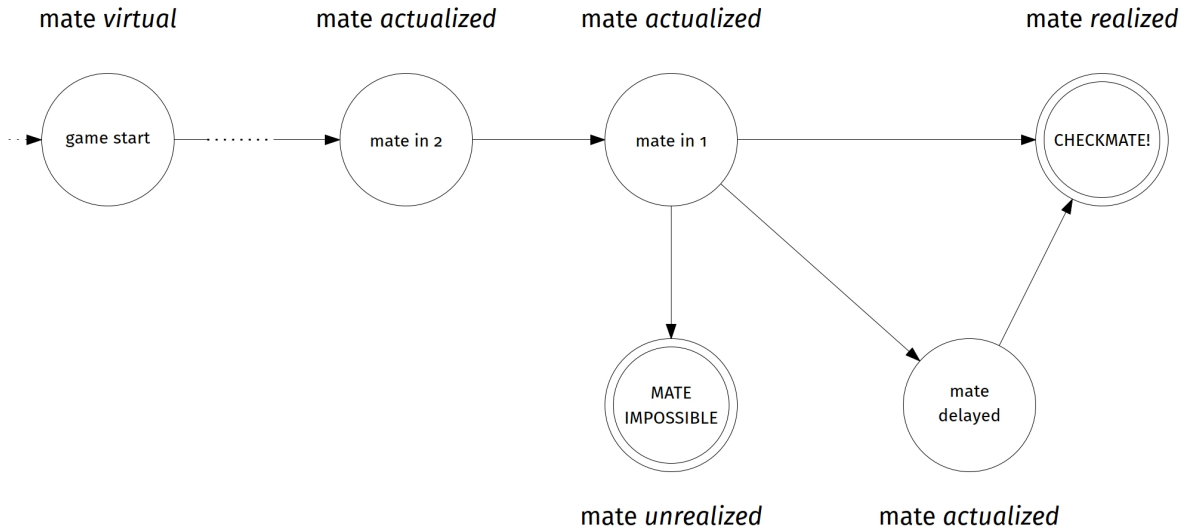


Figure 2. Graph representation of the different possibilities for the example in Figure 4

Right before the game starts the possibility of Jane winning the game is in a *virtual* mode. When Jane correctly sees the possibility of “mate in 2”, her intention of giving a check mate is *actualized* (all conditions are given for her to win). If Jane makes a bad play, though, she will lose the game and her chance for a mate becomes *unrealized*. If she makes a move that is neither optimal nor fatal, she may win the game with a few additional moves (her chance for mate remains actualized). Her intent of winning the game becomes realized when the checkmate move is carried out.

In the FSA method here employed, modes of existence (represented by circles) constitute *states*. A state is simply a point of transition that may connect to other states, but not necessarily to all others—i.e., given a state, some transitions are possible, others are impossible. States that are marked by a double circle (such as “mate impossible”) represent *terminal* states, that is, states where the process may end without the need to transition to any other state. There can only be one initial state (in this case “game start”) represented by a circle preceded by a short arrow. But what motivates the transition from one state to another? In the context of computer science this would be the taking of a character from a previously defined alphabet of symbols. In the case of narrative semiotics this could refer to an event or a process the Subject undergoes—in the general case of the subject on a quest, for example, the transition from *actualized* to *realized* would have performance as its event. In this specific case, although not shown in Figure 2, these events would be the act of moving a piece in the chessboard by Jane and Mary. In general, an automaton is fully determined by (Hopcroft et al., 2006): (1) the initial state (“game start”), (2) the alphabet or list of events that may cause a transition (e.g., moving pieces in the chess board), (3) the transition function (the arrows), (4) the full list of states, and (5), the terminal states (“mate impossible” and “checkmate!”).

2.7. Example II: Hamlet

The course of events in Shakespeare's masterpiece *Hamlet* can be explained with the schema of the subject on a quest (Greimas et al., 1990; Fontanille, 2006, pp. 73-77). This example focuses specifically on the encounter between the Sender (the Ghost) and the Receiver (prince Hamlet), which we refer to as the state/mode of *possibility*. This mode, insofar as it is prior to the *virtual*, that is, to any relation of desire between a Subject and an Object, is characterized by an indetermination proper to the first sensible encounter.

In the case of *Hamlet*, the first ones to meet the ghost of King Hamlet are prince Hamlet's acquaintances. Uncertain of what the figure before them is, they refer to it as "the apparition" (*Hamlet*, Act 1, Scene 1, Shakespeare, 1600):

MARCELLUS

Horatio says 'tis but our fantasy
And will not let belief take hold of him
Touching this dreaded sight twice seen of us.

Therefore I have entreated him along
With us to watch the minutes of this night,
That if again this *apparition* come
He may approve our eyes and speak to it. (...)

Enter GHOST.

MARCELLUS

Peace, break thee off. Look where it comes again!

BARNARDO

In the same figure like the king that's dead.

MARCELLUS

(to HORATIO) Thou art a scholar. Speak to it, Horatio.

BARNARDO

Looks it not like the king? Mark it, Horatio.

HORATIO

Most like. It harrows me with fear and wonder.

Even if Horatio valiantly approaches the apparition and commands it to speak, the apparition will not reveal what or who it is to them. This can be compared to the first encounter with the rabbit-duck drawing (see Section 3.4), though in the case of *Hamlet* effectively making sense of the apparition does not depend exclusively on the will of Horatio and his comrades, but rather on an interaction with the Ghost that does not take place. The Ghost will eventually speak, but to no one else than prince Hamlet himself (*Hamlet*, Act 1, Scene 4, *ibid.*):

HAMLET

Angels and ministers of grace defend us!
Be thou a spirit of health or goblin damned,

Bring with thee airs from heaven or blasts from hell,
 Be thy intents wicked or charitable,
 Thou comest in such a questionable shape
 That I will speak to thee. I'll call thee "Hamlet,"
 "King," "Father," "royal Dane." O, answer me!
 Let me not burst in ignorance, but tell
 Why thy canonized bones, hearsed in death,
 Have burst their cerements (...)

GHOST

I am thy father's spirit,
 Doomed for a certain term to walk the night
 And for the day confined to fast in fires,
 Till the foul crimes done in my days of nature
 Are burnt and purged away.

Prince Hamlet's first reaction is to express fearful wonder upon the ghost. When Hamlet manages to overcome fear to recognize the semblance of his father in the apparition, the Ghost then reveals itself: "I am thy father's spirit". The intensity of the first sensible encounter was not enough for prince Hamlet to make sense of the apparition. It was rather the *interaction* that took place between himself and his father's ghost that proved his suspicions right. Nonetheless, the initial intensity of the encounter was key in the Sender-Receiver *manipulation*, i.e., in the Ghost convincing prince Hamlet to kill Claudius so that he may rest in peace. In this case it is not clever argumentation, but affect, that accomplished manipulation.

If the first impression of the Ghost upon prince Hamlet corresponds to *possibility* as a mode of existence, after accepting the Ghost's wishes Hamlet enters a *virtual* mode regarding his intention (that the soul of King Hamlet rests in peace). Killing his uncle, the murderer of his father, is the performance required to fulfill the intention, and madness will be prince Hamlet's main actant Helper in his quest. This example illustrates how the mode of *possibility*, of sensible encounter, allows us to effectively furnish the actantial Subject with a sensibility that ultimately leads to the construction of an intention, and to its subsequent fulfillment by means of performance.

2.8. Example III: Michelangelo's *David*

In Section 1, Michelangelo's sculpture *David* was used to introduce the notion of modes of existence, and here we develop it in light of the perspective of narrative semiotics.

In this example, the actant Sender is the Guild of Wool Merchants of Florence who, in 1501, approached Michelangelo to offer him the commission of sculpting the *David* (Shaikh & Leonard-Amodeo, 2005). Perhaps negotiations went back and forth, or perhaps Michelangelo accepted without hesitation, but we know that Michelangelo ended up accepting the commission, and thus became a Subject that desires an Object of value. However, it is important to have clarity about what the Object of value actually is—i.e., what the intention driving the action is. For the sake of this example we can say that Michelangelo's desire was to sculpt a statue of the biblical figure of David that was highly appreciated by his commissioners from the marble stone that was given to him. A different motivation, and very frequent among artists, is that the Object or intention is rather to produce an artwork they can feel proud of.

In Section 2.5 (A) it was established that performance presupposes competence. Did Michelangelo already possess all the *knowledge to sculpt the David*? (i.e., the endotactic actualizing

modality). Did he already have all of the tools required for him to *be able* to sculpt such a large piece of marble? (i.e., the exotactic actualizing modality). Although Michelangelo was already a seasoned artist at the time of accepting the commission, he was also known to have studied anatomy. Even though “direct anatomical dissection was forbidden during the Renaissance”, fashioning a life-sized wooden crucifix altarpiece for the *Santo Spirito* in Florence allowed Michelangelo to access bodies awaiting burial (Shaikh & Leonard-Amodeo, 2005, p. 75). Many of his works demonstrate his enthusiasm and mastery of anatomy, to the point of standing as models for artists for centuries to come. Conversely, in this example we can assume that Michelangelo was able to acquire the existing tools required to carve large marble stones. The third pair of actants, the Helper and the Opponent, refer to things or events that affect the Subject’s process of gaining competence positively or negatively. For example, the stipend that Michelangelo received from his commissioners was a Helper (it allowed him to acquire tools), while an event such as getting sick would be an Opponent.

Figure 3 represents the action/narrative process of Michelangelo sculpting the *David* relying on certain assumptions. Greimas’s triad of modes of existence—virtual (V), actualized (A) and realized (R)—as well as the direct transition from V to A, and A to R is made explicit in the figure by the bold arrows. The process of gaining competence, i.e., of transitioning from V to A, contemplates acquiring sculpting tools and studying anatomy as two separate processes. Note, however, that since the process of sculpting goes over several years, there is no clear demarcation between A and R, but rather a *feedback loop*: Michelangelo studies anatomy, then sculpts, studies some more, and continues sculpting. Note as well that the last stage includes sanction by the commissioner. If the commissioner is satisfied with the sculpture, then Michelangelo becomes conjoined with the intention of producing a sculpture of *David* that the commissioner likes. Even though the Sender actant is a transcendent entity in relation to the Subject actant, the Subject as an *actor* can include both the Sender and Subject actants. That is to say, had the intention been to produce a sculpture he approved of himself, Michelangelo would have been the final judge of his own work, and thus the one that determined whether the intention was realized or not.

Figure 3 illustrates a number of possibilities of what can go wrong for Michelangelo. He might be so stressed with the commission that he gets nervous breakdown and never finishes the work; he might make a mistake sculpting but that fortunately can be compensated for with the proper sculpting techniques; he might even be so unlucky that in the process of sculpting he breaks the stone, in which case the intention never becomes realized; or he might finish the commission but his work is not appreciated by the commissioner.

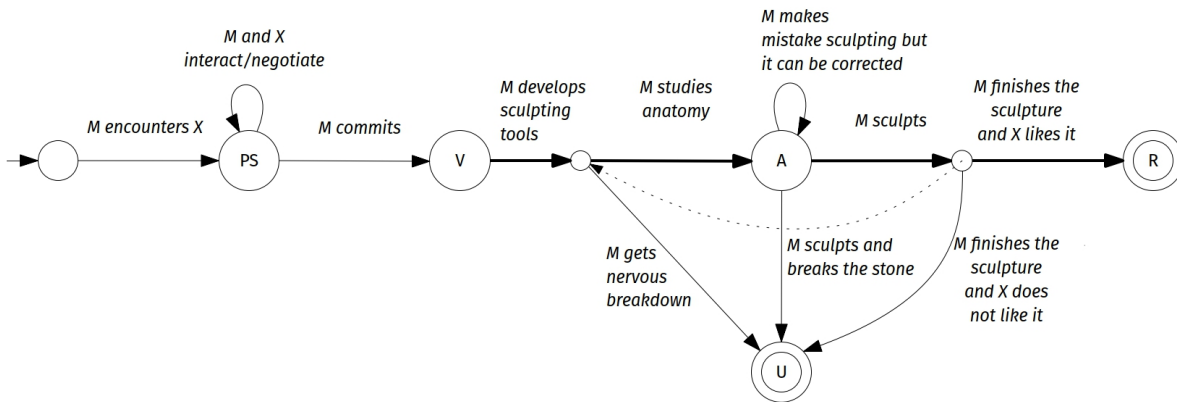


Figure 3. Representation of Michelangelo’s (M) process of sculpting the statue of *David* and the different possibilities along the process in terms of modes of existence. X stands for the commissioner.

PS: *possibility* (refers to the phase of manipulation), V: virtual, A: actualized, R: realized, U: unrealized

2.9. Modes of existence according to Greimas: a first interpretation

The diverse possibilities present in the different stages of the action process of Michelangelo sculpting the David, as well as their relation to the modes of existence discussed so far, were represented in Figure 3 using the FSM method.

A generalized systematization of Greimas’s modes of existence is represented in Figure 4. The figure recognizes the Greimasian triad of virtual/actualized/realized (V/A/R), but includes previously the mode of possibility (PS), corresponding to manipulation, and most importantly, *unrealized* junction between the Subject and the Object is acknowledged as an additional mode of existence. Even though the mode of possibility is accounted for by Greimas in the phase of manipulation, when applied to intentional action it is useful to include this mode that precedes any determination of intention.

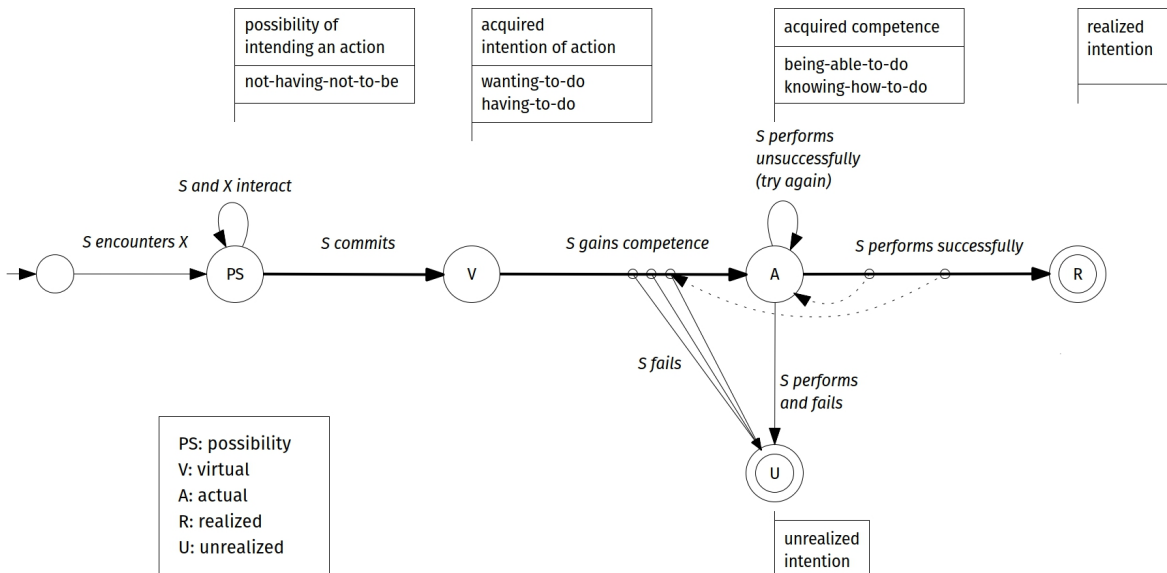


Figure 4. Modes of existence applied to intentional action based on Greimas’s narrative semiotics. The representation method uses graphs applied to finite-state automata (FSA)

3. Fontanille: Modes of existence from the perspective of tensive semiotics

Greimas's approach towards the semiotic subject is essentially pragmatic, i.e., action-based. Fontanille, on the other hand, seeks to endow the Subject with sensible and aesthetic capacities that are central to the process of producing signification (Fontanille, 2017a, 2017b). According to Fontanille, the body is the *minimal actant* that occupies the "center of reference of the discourse"—understanding discourse not merely as text, but rather as the world of signification in which *semiotic subjects* (i.e., subjects capable of producing signification) are immersed (Fontanille, 2006, p. 59).⁶ Semiotics must rely on a theory of modes of existence in order to be able to specify the status of semiotic entities, but the distinction between modes of existence, Fontanille argues, ought to rely on a single category: *presence* ("the sensible quality par excellence") is thus the point of articulation between modes of existence and the tensive structure, which lies at the core of Fontanille's semiotics (Fontanille, 2006, p. 14, p. 35). Understanding modes of existence as modulations of degrees of presence allows Fontanille to posit the *co-existence* of semiotic entities in discourse—as opposed to their mere co-presence—thus endowing discourse with "thickness". Furthermore, depending on their level of presence, semiotic entities exert a "pressure to exist", pushing, as it were, to become realized (ibid., 2006, p. 88).

3.1. Presence and modes of existence

Fontanille's theory acknowledges the three modes of existence proposed by Greimas in his narrative semiotics (i.e., virtual/actualized/realized), while putting forward two additional modes (potentialized/virtualized). In Fontanille's view, these additional modes become necessary because the act of signification results from the interplay of two fundamental *tensions* between what is outside and inside of the field of discourse, namely (Fontanille, 2006, p. 199):

1. A tension from *virtual* to *realized*, mediated by the *actualized*, which corresponds to the ascending trajectory.
2. A tension from *realized* to *virtualized*, mediated by the *potentialized*, which corresponds to the descending trajectory.

Both tensions complement each other during the process of producing signification: when a semiotic entity becomes realized respect to a perceiving subject, another entity is sent back to the virtualized stage. Interpretation, in fact, consists of coming and going from one to the other (ibid.). In this coming and going, Fontanille maintains there are two possible transitions between modes of existence in the ascending trajectory (*virtual* to *actualized*, and *actualized* to *realized*) and two in

⁶ While *Subject*, with a capital "S", refers to the Subject in the context of Greimas's actantial model, by *semiotic subject* I refer to the subject immersed in the world and in constant interaction with it, that is, a subject that experiences and produces signification out of the world. This may refer to individual or collective experiences in specific situations or in everyday life—e.g., dancing at a party, or walking around the main square. The semiotic subject is also present in written narratives in general. In this case, the world in which the subject is immersed in refers to written discourse (i.e., to the written text that tells us the story or narrative in which the subject, possibly one of many, takes part). Novels are good examples of "worlds of discourse" in which several subjects partake, where each has different intentions, experiences and interactions with their world and with other subjects.

the descending trajectory (*realized to potentialized, potentialized to realized*)—although this will be contested in Section 4.2. The relation between tensions, trajectories and transitions is summarized in Table 2.

Table 2. Tensions, trajectories and transitions of modes of existence in tensive semiotics. *V* refers to the virtual mode of existence, *V2* to the virtualized, *A* to actualized, *R* to realized and *P* to the potentialized mode.

Tensions	Trajectories	Transitions
<i>From virtual to realized</i>	<i>Ascending trajectory</i>	
	virtual to actualized	V >> A
	actualized to realized	A >> R
<i>From realized to virtualized</i>	<i>Descending trajectories</i>	
	realized to potentialized	R >> P
	potentialized to virtualized	P >> V2

The interplay between the two tensions in relation to a semiotic subject embedded in a field of *discourse*—the field in which processes relating the sensible to the inteligible take place— is represented in Figure 5.

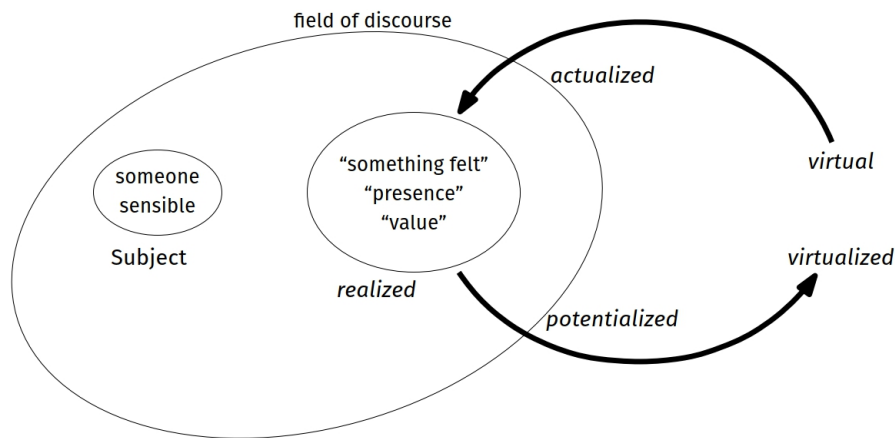


Figure 5. Modes of existence characterize the tensions between what is outside and inside of the field of discourse of a sensible subject (virtual/realized and realized/virtualized). Note: this figure is an adaptation of Fontanille’ illustration (2006, p. 199) by Prof. in semiotics José García Contto (personal communication, October 20, 2020)

It should be stressed that Fontanille’s definition of the *potentialized* mode is substantially different from the definition presented in the *Semiotics of Passions* (Section 2.4) on two grounds. First, Fontanille defines the *potentialized* mode as the mediator in the transition from *realized* to *virtualized*; not as the mode that enables the Subject to run simulacra from which passions arise. Second, regarding the order of modes of existence, the potentialized mode is shifted one mode further away from the *realized*. Thus, for Fontanille the order of modes of existence, sorted according to their degree of presence, is: *virtual/virtualized >> potentialized >> actualized >> realized*.

3.2. Three definitions of modes of existence according to Fontanille

Explaining modes of existence as modulations of presence, allows Fontanille to formulate three definitions on modes of existence that should in principle be congruent—the theoretical exposition of these definitions, as well as the examples addressed in this section, will, however, show that in some cases they seem to be incongruent, or that they might refer to different things. The first one is from the viewpoint of the tensive structure (what we call the *tensive correlation*), the second one from that of modalities, and the third one is a set of explanatory definitions for each mode.

3.2.1. Definition 1: Modes of existence in terms of intent and apprehension

From the perspective of the tensive structure, presence engages the two following “elementary semiotic operations” (ibid., pp. 11, 14--15):

1. *Intent*, which refers to the *sensible* (the plane of content), to affect, to the perception and sensibility to presence. Intent varies in intensity, guiding and directing “the flux of attention” under the control of intention.
2. *Apprehension* refers to the *intelligible* (the plane of expression); it sets the boundaries of the “domain of pertinence of the signifying process”. It varies in extension in terms of position, magnitude, area or quantity.

The sensible body *correlates* intent and apprehension in its taking of position (assuming a point of view). The *tensive correlation*, as we shall henceforth refer to it—i.e., the correlation of relative degrees of intensity with relative degrees of apprehension—results in the emergence of four typical zones (ibid., p. 42), each of which corresponds to a specific mode of existence (see Table 3). Signification, Fontanille maintains, arises from *tensive schemas*, that is, from sequences of tensive correlations that can in turn be combined to form larger units (*canonical schemas*) that become recognizable by a culture (ibid., p. 66-70)—an example of which is the subject on a quest (refer to Section 1).

Table 3. Modes of existence as a function of levels of intent and apprehension (Fontanille, 2006, p. 89)

	Intense Intent	Weakened Intent
Extended Apprehension	realized	potentialized
Restricted Apprehension	actualized	virtualized

The first of approach to apply tensive correlation to modes of existence is to conceive of tensive correlations as *modes of presence*. Table 3 is used by Fontanille in his study of rhetorical figures to characterize the relation between what is given in the plane of expression and what ends up being intended by the interpreting subject (refer to the example on irony in Section 3.3). This, however, is only the first of two approaches in the application of the tensive correlation.

The second approach, which in our view is better at differentiating tensive from narrative semiotics, is explained by Fontanille (2006, p. 84), but it is not explicitly distinguished in its applicability, nor deployed extensively in his examples on modes of existence. In this alternative approach, the tensive correlation is used to define a typology of points of view, given that the *point of view* introduces an imperfect apprehension, but at the same time allows for its compensation

by mediating/controlling the correlation of levels of intent (in terms of intensity) and levels of apprehension (in terms of scope, or extension of perception). The resulting combinations or strategies are summarized in Table 4. The *englobing* strategy holds a globalizing pretension apprehending the object as a whole or *gestalt* (apprehension is extended and the intent is intense), while the *particularizing* strategy focuses on a specific feature or element of the object without holding the intention of apprehending it in its wholeness (thus apprehension is restricted and intent is weakened). The *elective* strategy focuses on one aspect of the object regarded to represent the whole (therefore apprehension is restricted but the intent is intense), while the *cumulative* strategy apprehends the object as a collection of parts, synthesizing, as it were, these restricted intents to form an extended apprehension (ibid., pp. 84-85).

Table 4. Typology of points of view in terms of strategies to optimize the recovery of intent by apprehension (Fontanille, 2006, p. 85)

	Intense Intent	Weakened Intent
Extended Apprehension	Englobing strategy	Cumulative strategy
Restricted Apprehension	Elective strategy	Particularizing strategy

The two different approaches in the use of tensive correlation are not to be conflated. The first approach (Table 3) has to do with modes of presence: how what is sensibly present in the plane of expression relates to what is present at a subjective level in the plane of content. For example, while looking at the statue of the David, its size may suggest to me that the statue is about a magnanimous figure, or upon noticing that it is placed in a prominent place in the city of Florence, that the statue must be important to the identity of the city. The use of the first approach is illustrated in the example on irony (Section 3.3.2). The second approach (Table 4), has to do with how I choose to experience sensibly a semiotic object. I might stare at the face of the David and feel that the face alone represents the whole of the statue (elective strategy), or look at it from its feet to its head in order to get a more detailed impression of the statue as a whole (a cumulative strategy).

3.2.2. *Definition 2: Modes of existence and modalities*

Fontanille agrees with Greimas on the use of modalities to define modes of existence. As Table 5 shows, the definitions of the *virtual*, *actualized* and *realized* modes of existence remain identical to Greimas’s own (see Section 2.1), while the modalities of *adhering* and *believing* are introduced to define the *potentialized* mode (Fontanille, 2006, p. 118)—*adhering* refers to “believing (in) someone” and *believing* to “believing in something” (ibid.). Note that in terms of modalities, Fontanille makes no distinction between *virtual* and virtualized (2006, p. 199).

Table 5. Definition of modes of existence in terms of modalities according to Fontanille (2006, p. 118)

modes of existence	virtual	actualized	potentialized	realized
exotactic:	having-to	being-able	adhering	causing-to-be
endotactic:	wanting	knowing	believing	being

3.2.3. Definition 3: Explanatory definition of modes of existence and co-existence

In addition to the two previous definitions, Fontanille provides explanatory definitions for each mode of existence which we are quoting directly (2006, pp. 199-200), in part because we find some of them to be unclear:

- *virtual mode*: “is that of the structures of an underlying system, of a *formal competence* available at the moment of the production of meaning”. This definition is compatible with Greimas’s own.
- *actualized mode*: “is that of the forms that come about in discourse, and the conditions for their coming about”. This definition could be understood as being compatible with Greimas’s account, but Fontanille adds: “the actualization of a coloring in an image, for example, entails the whole set of tensions and contrasts into which it enters, by virtue of its coexistence with neighboring colorings”. This no longer seems to be related to being-able-to-do and/or knowing-how-to-do.
- *realized mode*: is that through which “enunciation makes forms of discourse meet up with a reality, a material reality of the plane of expression, a reality of the natural world and of the sensible world for the content plane”. This definition too is compatible with Greimas’s own.
- *potentialized mode*: “a form is said to be potentialized when its diffusion or its recognition is such that it can figure as a site of discourse (type, commonplace, or motive, available for other convocations)”. This definition seems to be related to remembering, to memory, or to an accumulation of knowledge. However, in my view, the feature of being “available for other convocations” (being-able-to-be-again) makes it easy to confuse with the *actualized* mode (defined by the modalities being-able-to-do, knowing-how-to-do).

Two important issues can be raised on these definitions. The first one is that Fontanille does not seem to provide any systematic manner to differentiate the *virtual* from the *virtualized* mode. Fontanille contends that the semiotic subject cannot remove itself from the field of discourse back into the structures of the system (the *virtual*) once realized. Reasonable as this claim seems, the rest of the theoretical system does not seem to support it or explain it: it can not be accounted for in terms of intent and apprehension (Definition 1), nor in terms of modalities (Definition 2).

The second issue is that there seems to be an ambiguity in the definition of the *potentialized* and *actualized* modes. The two are clearly distinguishable in terms of intent and apprehension, but the relation between the *potentialized* and the modality of believing/adhering is not definitely explained. Furthermore, as we shall illustrate in the example of the rabbit-duck illusion (Section 3.4), one can question the extent to which they are applied consistently.

3.3. Example IV: Applications of intent and apprehension

3.3.1. The subject on a quest

Fontanille provides an example of applying intent and apprehension in the tensive correlation to the subject on a quest using the first approach, where modes of existence are construed as modes of presence (Table 3). The subject on a quest starts with a subject that intends an object with high intensity, but with low apprehension, given that s/he does not yet possess it. This combination, according to Table 3, corresponds to an *actualized* mode of existence. This, however, differs from the mode of existence that would result from Greimas’s definition in terms of modalities (Section 2.1), according to which a Subject with a desire expressed by the modalities of wanting-to-do

and/or having-to-do is in a *virtual* mode respect to this desire/intention/object of value. This does not point to the incorrectness of one of the two definitions, but rather to the fact that the two mean different things by “modes of existence”: the first one refers to the intentional relation between the subject and the object, the second one to the conjunction or disjunction between a Subject and its Object.

3.3.2. Irony

The definition of modes of existence in terms of intent and apprehension is also deployed by Fontanille to understand figures of rhetoric such as *irony*. Consider that Mary says to James ironically: “That’s smart!”. From Mary’s stance, or from James’s stance once he interpreted the irony, the positive content (“that’s smart”) is *potentialized*: it enjoys extended apprehension because it is literally what the utterance asserts, but it is weakly intended since irony is actually pointing to the negative content (“that’s stupid/silly/not very smart”). Thus, the negative content is *actualized* because it is strongly intended but with restricted apprehension (ibid., p. 89).

It can be interesting to contrast this approach with that of Greimas in two different ways. First, in terms of the modes of existence of the positive and negative contents. When James first hears the utterance, the positive content is *realized* while the negative content is *virtual* (we don’t know if he will notice the irony). An instant later, once James understands the irony, the positive content is *actualized* (it can be entertained again whenever desired), while the negative content is *realized*. Second, the interpretation process of irony can be outlined using narrative semiotics as illustrated in Figure 6. It differs from the classical subject on a quest where the Subject usually starts empty handed, as it were, disjoined from the Object that determines it. In this case the *virtual* mode implies that S is already conjoined with the positive content of the utterance. Other factors in the act of enunciating the utterance such as intonation, context and gestuality act as a Helper actant. They provide the Subject with the being-able-to-be-conjoined with a different interpretation, the one that assumes the negative content of the utterance. This explanation of the interpretation of irony is causal (rather than experiential); it does not indicate the experience that one has interpreting irony nor the order in which semantic operations are performed. It does point out why some people fail to grasp irony: they are often incapable of relating the utterance to its context of enunciation, or to integrate additional information such as intonation to the semantic content of the utterance.

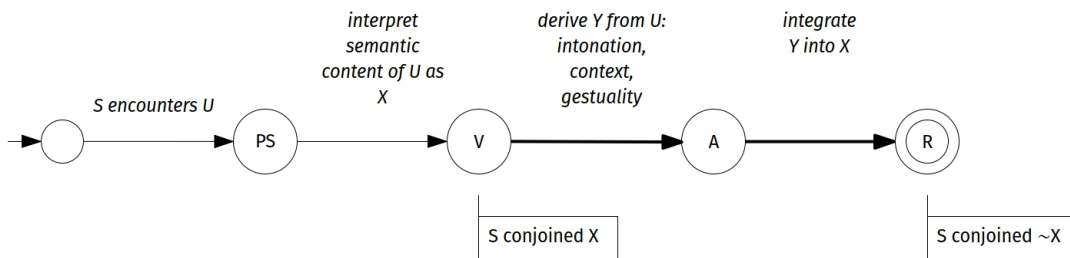


Figure 6. Greimas’s theory of modes of existence applied to irony. The Subject is first conjoined with the positive content X of the utterance U, but considering the intonation, context and gestuality in its perception of the utterance leads the Subject to interpret it in the opposite sense (~X).

Why can irony be particularly hurtful or irritating? This can be understood from Fontanille’s notion of *co-existence*: in the case of irony it is not simply the final interpretation we assign to it that counts, but rather the contrast between the positive and negative contents that are entertained at the same time with different levels of intent. From Greimas we can draw that the actual utterance expressing irony constitutes an Object of value for an interpreting subject. For example, if John has

a complex about not being intelligent, telling him: “That was particularly clever of you” can be more hurtful than plainly telling him that what he did was silly. This is because being intelligent is the Object of value, one with which John might believe he is in disjunction, and in the worst case he might believe it impossible for him to do anything to remedy that. Thus irony poses John as being conjoined with the Object of value in a simulacrum, but it actually implies John’s inability to attain realization.

3.4. Example V: The rabbit-duck illusion

The rabbit-duck illusion, illustrated in Figure 7, is a classic example of how different consistent interpretations of the same image are possible. In Section 3.2 (Definition 3) it was explained that in Fontanille’s account, signification is produced by simultaneous transitions along the ascending and descending trajectories. Fontanille argues that the rabbit-duck illusion is an example of “classical commutation”—for “the rabbit brings about the disappearance of the duck and vice versa”—and that the transitions taking place are: (1) from *actualized* to *realized*, and (2) from *potentialized* to *virtualized* (2006, p. 201).

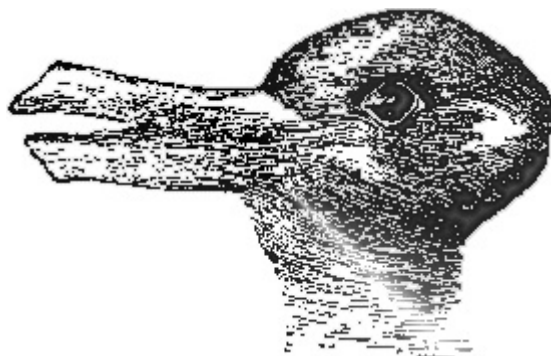


Figure 7. The rabbit-duck illusion (Weisstein, 2020)

First, we argue that Fontanille is wrong in the two transitions he attributes to the rabbit-duck illusion, precisely because he is right in saying that this illusion is a case of commutation. By definition, a commutative operation is symmetrical in that the result will be the same regardless of the order in which the terms of the operation are considered. This is our experience when we look at the figure of the rabbit-duck. Once we have been able to identify both, if we am interpreting the figure as referring to a rabbit, we can easily switch and interpret it as referring to a duck. This can be done back and forth indefinitely. Let us assume, for a moment, that the transitions that Fontanille proposes— $(A \gg R)$ and $(P \gg V)$ —are the case. If we are interpreting the figure as a rabbit, then the rabbit is *realized*, and the duck must be *virtualized*. If we now want to shift and interpret the figure as a duck, then the duck would actually be transitioning from being *virtualized* to being *realized*. But this does not correspond to the pairs of transitions Fontanille asserts, neither is it commutative: assuming first that we interpret the figure as a rabbit or as a duck will yield a different transition on the other side.

We can go deeper into the sequence of actions in this example by means of the following hypothetical, yet realistic, scenario:

1. Mary is walking by the street, and she sees for the first time the rabbit-duck image painted in a very big wall.
2. Mary stops and stares at the picture, and though she has not done it yet, she is convinced that she will manage to make sense of it, to recognize familiar forms.

3. Upon looking at the image for a while, Mary recognizes first the shape of a duck. “It is a duck!”, she thinks.
4. Mary notices that the drawing of the duck seems to be tricky, and suspects there may be other figures she has not recognized yet.
5. Some more time transpires, and Mary says: “yes, now I can see it is a rabbit too!”.
6. Although satisfied with having found two animals in the figure, Mary suspends these interpretations and stares carefully at the figure again, but she does not find any other animals.
7. Nevertheless Mary is amused with her discovery, so she then shifts her interpretation from rabbit to duck, and then back to rabbit. Having recognized both figures already she does this effortlessly.

This process is illustrated in Figure 8 using the FSA method applying the modal definition of modes of existence. Once the rabbit or the duck have been recognized in the figure, if they are not realized at a given time, they remain realizable and therefore *actualized*, since having interpreted the figure as a rabbit/duck once allows me to do so again at will. Unlike Fontanille’s suggested transitions, this figure does in fact represent a commutation from realized to actualized, and from actualized to realized, once both duck and rabbit have been recognized.

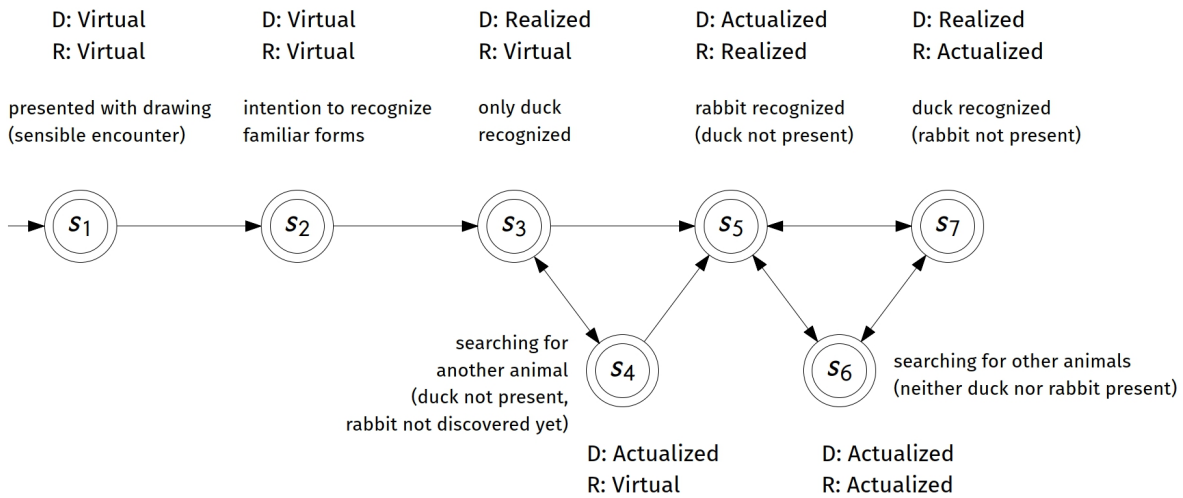


Figure 8. Graph for the process of recognizing forms in the rabbit-duck figure and the corresponding modes of existence (D: duck, R: rabbit)

In this example, all states/modes of existence can be termination states. That is to say that Mary can abort the process of finding the duck or the rabbit at any point of the process. Even as she walked by the street, Mary could have just noticed the figure without stopping by, hence terminating the process at this first state. Termination states are denoted by double concentric circles. An automaton in general is also given by its transition function; that is, the function that maps the input and the present state to the next state. This function is not represented in the figure because the event that occurs for Mary to pass from recognizing only the duck to recognizing the rabbit is a cognitive process, and such processes lie outside the concern of this article. It is the possible states, and the possible transitions from one state to another that Figure 8 focuses on. In this example, rather than determining modes of existence a priori, we have identified the different states of the process of interpretation of the rabbit-duck illusion by means of a thought experiment,

and from that basis identified the corresponding modes of existence using the definition of modes of existence based on modalities, given in Table 1, repeated below as Table 6 for the ease of the reader.

Table 6 (identical to Table 1). Definition of modes of existence in terms of modalities according to Greimas (Greimas & Courtés, 1979/1990, p. 132)

modes of existence	Competence		Performance
	virtual	actualized	realized
<i>modalities:</i>	<i>virtualizing</i>	<i>actualizing</i>	<i>realizing</i>
exotactic:	having-to	being-able	causing-to-be
endotactic:	wanting	knowing	being

4. Towards a robust narrative account

4.1. Reviewing the perspectives on modes of existence

Our endeavour in the course of this article has been to provide a succinct, yet faithful account, of three perspectives on modes of existence, and how these relate to each other. The first perspective concerns the relation between the system and the system put into practice, which results in the acknowledgement of two fundamental modes of existence: *virtual* and *realized*.

Greimas took the consequences of this first perspective one step further when he articulated it with the concepts of *competence* and *performance* in his narrative semiotics, the second perspective. A mediating mode, the *actualized*, was then introduced in between the *virtual* and the *realized*. Actualization makes sense only insofar modes of existence are understood in the context of a Subject that has an intention of action; namely, to attain an Object of desire, where becoming conjoined with the intention (i.e., *realization*) presupposes performance, and performance in turn presupposes competence. Consequently, we argue, the definition of modes of existence from the perspective of narrative semiotics is neither equivalent nor replaceable by that of tensive semiotics, as Fontanille and Zilberberg (2017, p. 125) suggest. The reason is that Greimas’s narrative perspective constitutes a system of *teleological causation* (Charles, 2012; Stein, 2011) insofar as the process by which a Subject becomes conjoined with an Object (or intention) is ordered as a series of presuppositions, and driven by a *final cause* (the “that for the sake of which”), i.e., intention itself. Representing “*X* presupposes *Y*” as “*X*>*Y*” we have the series of presuppositions shown in (8):

(8) realization of intention > performance > competence > intention.

Note how in (8) intention is present both in the end result of the process (*realization*) and in the early stage when an intention is established (i.e., in the *virtual* mode). This double role of intention, which translates to intention being an efficient cause and a final cause, is represented by Greimas in the double apparition of the actant Sender: first at the beginning to form an intention in the Receiver/Subject, and then at the end of the narrative to sanction the Subject’s performance, hence determining whether or not the Subject’s intention becomes *realized*. Going back to Michelangelo (Section 2.8), had his intention been to sculpt a statue that he would have been satisfied with himself, finishing the sculpture would not have sufficed, he would also have to have liked it—i.e., the same *actor* Michelangelo would have occupied three actantial roles: Subject, Receiver and Sender. This is precisely the advantage with describing narrative/action processes in

terms of teleological causation: causal relations hold the form of *hypothetical necessity* (i.e., presupposition), rather than forward entailment (Charles, 2012). For example, if a performance was successful (hypothesis), it is necessarily the case that the Subject had the required competence relative to its intention. The converse, however—i.e., given that the Subject has acquired a competence relative to an intention, a successful performance will follow—is not necessarily true. This accords well with the nature of narratives (e.g., a crime story with explicit determinations from the start is hardly of any interest) and with many intentional actions in that it allows for contingency.

Given that the narrative perspective on modes of existence constitutes a system of teleological causation—i.e., a system in which modes hold precise relations to each other given by presupposition and supported by the consistent use of modalities—we *take narrative semiotics as the framework on which to base a systematic theory of modes of existence*. Moreover, the narrative perspective is, we claim, capable of addressing the following aspects that are also central for tensive semiotics:

1. Tensive semiotics construes modes of existence as modulations of presence, where the degree of presence is determined by the relations between what is sensibly given to the subject and the resulting interpretations, i.e., in terms of the tensive correlation of intent and apprehension (Section 3.2, Def. 1, Table 2). This can, however, be described with comparable clarity in terms of modalities and actants that lead towards (or away from) competence and junction, as the example on irony in Section 3.3 made plain.
2. Tensive semiotics identifies the need for the notion of ascending and descending trajectories as tensions from the virtual to the realized, and from the realized to the virtualized, respectively. Transitions along both these trajectories can be handled perfectly well in narrative semiotics, as the examples of Michelangelo (Section 2.8) and the rabbit-duck illusion (Section 3.4) showcased.
3. Even what we regard as the most original contribution of tensive semiotics, which in our view is the one least exploited in Fontanille's *Semiotics of Discourse* (2006), fits neatly with narrative semiotics. Namely, given a *point of view*, intent and apprehension are regulated respect to each other by means of different strategies (Table 3). For a given narrative/action process, one could determine the transition between modes of existence using the narrative perspective, and associate each to a specific strategy. For example, the case of *Hamlet*, developed from a narrative perspective in Section 2.7, demonstrated the affective intensity of the Ghost's figure on prince Hamlet in the mode of *possibility*. This could be in turn correlated with the extended apprehension that Hamlet has of the Ghost when he has it right in front of him, and a similar procedure could be carried out for each mode in the narrative.
4. Tensive semiotics acknowledges the “thickness” of discourse that relies on the *coexistence* of different objects or interpretations at a given time, each in a different mode, and each exerting different levels of “pressure” to become realized depending on this mode. The case of the rabbit-duck illusion (Section 3.4) showed that this too can be expounded from the perspective of narrative semiotics, where the interpretations of duck and rabbit were found to coexist, one *realized* and the other one *actualized*, as the subject commutes easily from one to the other.

4.2. A robust narrative account on modes of existence

In what follows, we address what we consider to be inconsistencies in the narrative and tensive perspectives on modes of existence as Greimas and Fontanille formulate them. Next, we provide a more robust account on the basis of narrative semiotics.

One of the limitations common to both narrative and tensive semiotics in regard to modes of existence is that the relation between the *potentialized* mode and its corresponding modality of believing/adhering to (Table 5) remains unclear. In narrative semiotics the *potentialized* is hesitantly invoked to account for the capacity to run simulacra; in tensive semiotics it is defined as the mediator in the transition from the *realized* to the *virtualized*. Rather than engaging in a dispute over the correct definition of the *potentialized*, we take the most valuable import to be the idea that an intention can move not only towards the realized (in the ascending trajectory), but likewise away from it (in the descending trajectory). Hence the importance of the FSA method, which allows us to identify *all of the modes* of existence traversed in a particular narrative/action process, as well as *all possible transitions* in both directions from any mode to any other.

Before providing a general account of modes of existence, however, it is necessary to address an ambiguity in the relation between conjunction and disjunction. Namely, what is the fundamental difference between not-disjoined and conjoined, and between not-conjoined and disjoined? To address this problem we resort to defining the actant Subject's narrative trajectory (i.e., its process of intentional action) in terms of *competence* and *junction*. At first, both variables could be regarded as binary: the Subject either has a competence ($C=1$) or they do not ($C=0$), the Subject is either conjoined with the Object ($J=1$) or else they do not ($J=0$). We propose, however, that *a third possible value be introduced for competence*: an indeterminate value ($C=e$), which is what will define the *virtual* mode of existence as such. We define the virtual mode as that in which the Subject and the Object are disjoined ($J=0$) and the competence is undetermined ($C=e$). Assuming that indeterminate competence can only be the property of a Subject right at the beginning of the narrative/action process (i.e., in the *virtual* mode) provides an effective solution to the problem of formalizing Fontanille's remark that one can never return to the *virtual* mode (to the structures of the system) once the Subject has started the narrative/action process. Assigning three possible values to competence and two to junction results in six possible combinations, as Table 7 shows. Each of these can be related to define modes of existence, while being compatible with Greimas's modal definitions (Table 1). Note that the *unrealized* mode—the combination of no competence and no junction ($0,0$)—could be regarded as equivalent to Fontanille's *virtualized*. The combination of indeterminate competence together with junction ($e,1$), however, is considered to be impossible, though this might be a matter to explore further. Finally, when the Subject achieves junction with the Object after performing, it might be that competence is retained after performance—thus making the performance repeatable as in $(1,1)$ —or that although junction has been achieved, the Subject no longer has the competence to perform again, i.e., $(0,1)$.

Table 7. Modes of existence defined according to the values of competence and junction
(*e*: undetermined, *l*: present, *0*: absent).

Competence (C)	Junction (J)	Mode of existence	
e	0	<i>virtual</i>	1
e	1	<i>impossible?</i>	-
l	0	<i>actualized</i>	2
l	1	<i>realized</i>	3
0	0	<i>unrealized</i>	4
0	1	<i>realized</i> (not repeatable)	3

Four different modes of existence were identified in Table 7. What follows is the specification of all possible/impossible transitions between them considering the mode of *possibility* as well. This is shown in Figure 9 using the method of FSA.

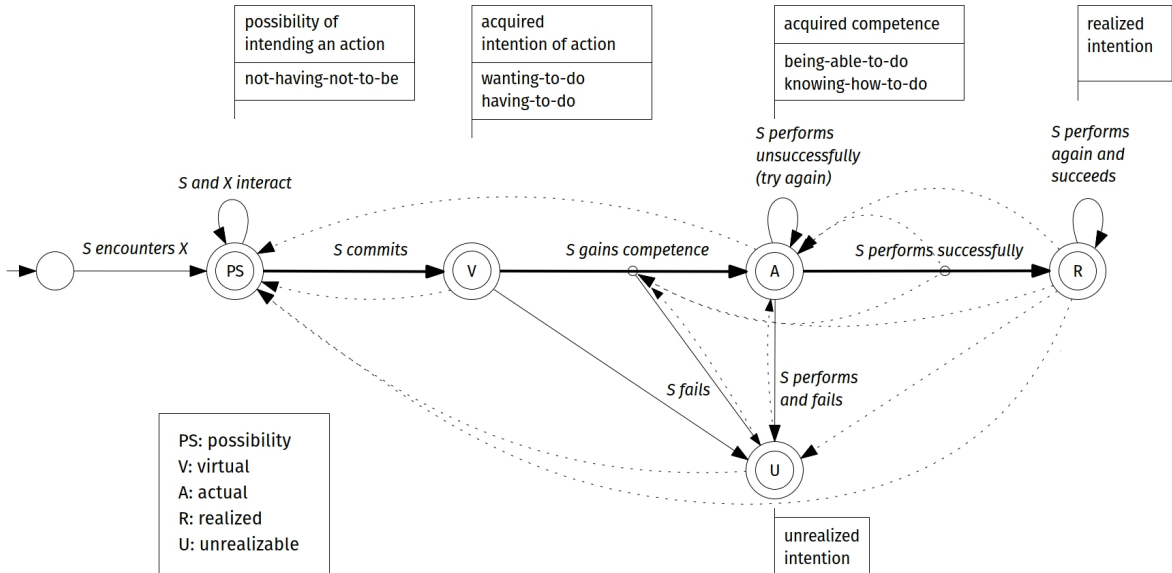


Figure 9. Modes of existence and possible transitions between them represented according to the method of finite state automata, and defined according to modalities based on Table 1.

A few remarks are in order. First, regarding *mobility*: recall that the double circle in FSA represents a *terminal state*, that is, a state which does not require any further transitions. When playing chess, for example (Section 2.6), we saw that in every move taken by a chess player a very large number of games becomes *unrealized* (U); furthermore, they remain unrealized: U in this case is a terminal state. Consider, in contrast, the case of Michelangelo sculpting the *David* in Section 2.8. Michelangelo might have had a nervous breakdown that renders him unable to perform (thus arriving at U). Nevertheless, Michelangelo was strong enough to recover and to continue sculpting, which means that his intention transitioned back to the *actualized* mode (A). To the best of our knowledge, this property of modes of existence, which we shall name *mobility*, has not been discussed in the literature in (post)Greimasian semiotics. It is not only important to determine which

modes of existence intervene in a specific narrative/action process, or what are the possible transitions between them; it must also be specified whether or not the process continues if it arrives at a given mode, and what event does this mobility or immobility depend on—in the case of Michelangelo, it depended on his health recovery.

Second, Figure 9 shows a small circle between the virtual and the actualized, and a similar circle between the actualized and the realized. This is to indicate that some action/narrative processes can have a fluent transition between the *virtual* and the *actualized*—as is the case when playing chess, where every play constitutes gaining competence and performing to fulfill the intention of a checkmate—or between the actualized and the realized—as happened to Michelangelo, who sculpted the *David* in the course of three years, rather than sculpting the whole figure at once. Moreover, the example of Michelangelo, developed graphically in Section 2.8, shows the possibility of transitioning from in between the actualized and the realized (sculpting) to in between the virtual and the actualized (gaining competence, for example studying anatomy).

Third, the dotted arrows in Figure 9 denote transitions along the descending trajectory. As the figure shows, these transitions are not only two in number as Fontanille maintained, but add up to nine due to the inclusion of the mode of *possibility*. The justification for including this mode is that in order to properly describe intentional action, we must account for the possibility of questioning, giving up, or modifying an intention; only in this way can we go back to the virtual. Fontanille construed movements along the descending trajectory as the fixing of living forms into stereotypes, and apparently therefore related the *potentialized* to the modalities of belief. These fixings, as well as the possibility of integrating newly discovered competences or strategies of performance given an intention, can in deed be accounted for if we state that competence—especially in the form of knowing-how-to-do—is *accumulated* by the Subject as it traverses all the different modes in their process of intentional action. The knowing-how is not statically “remembered” (skills such as sculpting or playing chess are not), but it becomes embodied, as it were, and capable of being recalled in further performances, even if it is altered by factors such as time.

5. Conclusion

Should this work be granted any merit, it will not be the discovery of a ground breaking semiotic concept that illuminates the theorizing of modes of existence. Its contribution rather lies at having dwelt into that which was already there, namely the perspectives of narrative and tensive semiotics on this subject matter. Many accomplished theoretical accounts pay little importance to examples; we have striven for the opposite. We believe all of the examples this work has dealt with have demonstrated both the pertinence of narrative semiotics to define modes of existence, its capability to deal with many of the concerns raised by tensive semiotics, as well as the ease and clarity that the method of finite state automata brings to identify the possible transitions for any given mode. Some of the most relevant contributions of this work are the following:

1. Competence was redefined as having three possible values, where the third one implies *indetermination*, and is proper of the virtual mode. This resulted in 5 different modes of existence counting the mode of *possibility*, all of which have been precisely defined in terms of modalities.
2. The mode of possibility proved useful in the context of intentional action, since it allows the intensity of sensible encounter in the formation of intention to be taken into account. In addition, it is connected to several feedback loops constituted by other modes pointing towards it.

3. The method of finite state automata was not only of great value in characterizing the different action/narrative processes. The concept of terminal state allowed us to determine a property of modes of existence that has received little or no attention: their *mobility*.

The skeptic might wonder if it is really necessary to bring in a method from computer science into semiotics. Upon a closer look, however, Greimas's method of the semiotic square (which, like finite state automata, is both graphical and conceptual) was devised with a strong influence from mathematics (Corso, 2014), and it became the cornerstone of the formulation of the "deep structures" of the trajectory from the intelligible to the sensible (Greimas & Rastier, 1968). Likewise, the change in paradigm of tensive semiotics respect to narrative semiotics was possible thanks to the two-dimensional function of gradients of intensity vs gradients of extent (Fontanille & Zilberberg, 2017; Hébert, 2006b). Our claim is that the conceptual power of narrative syntax, on the other hand, has not been worked out to its full consequences due to the lack of a method that brings both conceptual and representational clarity. Furthermore, modes of existence do not belong to the level of deep structures such as the semiotic square or tensive correlations, neither to the surface level where the manifestation of the sensible world takes place. Rather, they lie somewhere in between, and both the semiotics of Greimas and Fontanille agree that the production of signification depends on the possible transitions from one mode of existence to another; that is to say, *signification depends on a syntax of modes of existence*. Hence our contention, supported by the many examples developed in this work, is that the method of finite state automata proves to be an outstanding candidate (if not the best, for we know not of any alternatives) to fulfill this task.

This study has also shown that there does not seem to be a consistent usage of the *potentialized* mode, neither in the *Semiotics of Passions* (Greimas & Fontanille, 1991) nor in Fontanille's semiotics of discourse. Given that from the narrative perspective the examples were solved without referring to this mode, it is left for further study if the *potentialized* mode is in fact required as a distinct mode, or if it suffices to keep the more general concept it refers to: that there is a trajectory towards *and away* from the realized. If the former alternative is chosen, the relation between the potentialized mode and the modalities of believing/adhering to must be unequivocally defined.

As regards to future work, we would like to suggest two plausible hypotheses that spring from the robust account of modes of existence. First, Greimas's model of the subject on a quest, including the mode of *possibility*, seems to agree with theories of intentional action from analytic philosophy. Wu (2011, 2017), for example, defines intentional action as the solution of a selection problem where, from a myriad of possibilities, only certain inputs (perceptual and mental) are matched to an output (behavior itself). This is congruent with the canonical schema of the subject on a quest, where the subject is presented with a space of possibilities in the *virtual* mode, and as the subject gains competence, performance (Wu's output) becomes that which determines the success, failure or the necessary adjustments for intentional action. On the other hand, Fontanille's notion of the coexistence of interpretations or mental states, each in a different mode of existence, seems to accord with Wu's understanding of attention as a structure of priorities that is guided by perceptual and cognitive inputs. The second hypothesis is about tending a bridge between Fontanille and Landowski's semiotics by means of the robust account of modes of existence. Landowski's approach to the sensible and the aesthetic relies on four regimes—i.e., accident, regularity, junction and adjustment (Landowski, 2017). While the regime of *junction* corresponds the narrative semiotics presented in Section 2, the regime of *adjustment* refers to the interaction between two subjects interacting and thus forming together their intentions of action, without any manipulation of one over other, both adjusting to each other. In our view, the regime of adjustment is suitable to be analyzed using the method of finite state automata considering all the modes of existence of the

robust account incorporating the compatible features of tensive semiotics (Section 4.2). This would establish a link between the semiotics of Greimas, Landowski and Fontanille.

Finally, modes of existence is a complex subject that underlies (post)Greimasian semiotics. This work hopes to awaken interest upon it with the theoretical reviews, claims, criticisms and further lines of enquiry that have been suggested, along with the method introduced to develop a syntax of modes of existence.

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Authors' Address:

Email address: juan.miranda@ntnu.no

Email address: mgalarza@unsa.edu.pe

About the Authors

Juan Felipe Miranda Medina is a researcher, musician and dancer, currently focusing in the application of Greimasian semiotics to Afro-Peruvian dance. Given his doctoral degree in telecommunications and his artistic background, Miranda Medina's theoretical approach relies on the interplay of semiotics, engineering, philosophy, anthropology and ethnomusicology. He is currently an affiliated researcher at the Santo Domingo Center of Excellence in Latin American Research (SDCELAR), as a director of the project *CONTRAPUNTO: The living footsteps of Afro-Peruvian zapateo*, funded by the British Museum.

Marisol Cristel Galarza Flores is a Systems Engineer and expert in robotics. As a CEO of the laboratory in robotics Imagine Labs and General Manager of Ludio Robots S.R.L., Galarza was the winner of the national contest Start Up Perú 5G in 2017 for the design and production of a robotics kit. In 2020, she was the technical director of the research project for the design and implementation of a mechanical ventilator for the National University of Saint Agustin of Arequipa (UNSA), in Peru. Galarza is currently lecturing at UNSA in various subjects related to programming and computer science. Her interests include the interdisciplinary application of robotics and computer science concepts for the development of intelligent capacities.