1. *Cogito, ergo quis est?*

According to a well-known story, Mark Twain quashed rumors of his demise by announcing that they were highly exaggerated. On one natural interpretation Descartes proposed to himself as a thought experiment that he did not exist and by so doing demonstrated to himself that very existence. There are analogies and disanalogies between the two performances. I made use of some of the analogies in my first paper on the Cartesian *cogito* nearly half a century ago. (Hintikka 1962) I still stand by basically with what I said then, although I have come to realize that labeling Descartes’ argument as a “performance” has by itself little explanatory value. What this term does is to highlight the fact that in both examples someone has to do something himself in order to bring about the intended conviction. Mark Twain had to make an actual announcement himself. Likewise, even if Descartes does not have to do anything in the external reality, he must not only contemplate his possible nonexistence but actually try to assert it to himself. It is not enough for him to contemplate this existence in an agnostic mood.

Much of the problematic of the *cogito* nevertheless eluded me initially. I have since come to realize that there are further problems here. For one thing, we must ask, what kind of entity can Descartes hope to prove to exist. Italo Calvino’s nonexisting knight can assert in so many words “I do not exist” with ontological impunity as long as he is merely renouncing his existence as a physical object. (Cf. Calvino 1977.) He is not a counter-example to a performatory interpretation of the *cogito*. On the contrary, his very speech-act introduces him into Calvino’s fictional world as one of its existing denizens, indeed as the main character of the entire story. Hence one is led to ask, as I did in my second main *cogito* paper, “Cogito, ergo quis est?” “I think, therefore who exists?” (Hintikka 1996) Indeed, if there is no answer that may be right and the only conclusion that Cartesius would have been entitled to draw from *cogito* is “es denkt”, thinking is going on. By the same token, Descartes could scarcely have moved so quickly from *cogito ergo sum* to *sum res cogitans*. 
This “quis” question is relevant also because not all differences between different objects matter. For instance, I am not interested in contrasts between the mode of existence of physical objects and some kind of aetherial but still personal existence as was manifested by H.G. Wells’ invisible man. What counts is what is being assumed in any wh-question: the mode of identification of the presumed existant. Quine was right: no entity without identity. We need a system of principles of identification.

2. Identities as roles

The significance of such identificatory systems in our actual semantics and its independence of the reference system are still not being adequately appreciated by philosophers, in spite of the perfectly obvious fact that in our actual semantical practice we are tacitly relying on more than one system of identification in tandem with one and the same reference (descriptive) system.

The possibility of dual identification is illuminated by an analogy that Descartes might have cherished. In an amateur play, the *dramatis personae* have a double identity. They are on the one hand characters in the drama that unfolds on stage, maybe kings, queens, knights and so on. But when they step out of the door of the theater, they have only their identity as ordinary citizens, maybe as the proverbial “tinkers, tailors, soldiers, sailors.”

These actors can without confusing anybody use the same language on stage and outside the play. But the audience (or anyone else) cannot draw conclusions from what the actors say and do as a part of the play concerning their everyday life or vice versa. What is especially important here, is that this doublespeak extends to quantifiers and is in a way codified in them. A modal logician will immediately recognize that quantifiers are relative to a mode of identification. Speaking of “all King’s men” in a play refers to a different range of objects outside a play than as a part of it. In particular, this holds of the existential quantifier, which in our usual symbolic logic has a virtual monopoly when it comes to expressing existence.

The reason for this special relation of quantifiers to a mode of identification is obvious in a possible-worlds perspective. The values of quantified variables are well-defined individuals (or entities of some other logical type). This well-definedness implies that they enjoy the same
identity in different “possible worlds” (possible scenarios). Hence in order to interpret a quantifier one must “have a criterion for identity across different worlds (scenarios), in other words, some one particular mode of identification. This mode is what is provided by an identification system. It is not provided by specifying merely the reference of one’s expressions in different possible worlds one by one.

A mode of identification can be thought of as a framework or a “map” (Peirce used the word “chart”) that is shared by the relevant scenarios (“worlds”). Clearly, such a “map” can be drawn in different ways.

3. *Perspectival vs. public identification*

In epistemology and metaphysics, we are not dealing with fictional universes in the same sense of the word as in a play. But in a sense “all the world is a stage” for an epistemologist. An epistemologist or a semanticist can take an episode from the real world (or from an imagined one) and decide to identify the agents in terms of their roles in that episode instead of using their names, like a sportscaster who describes what “the pitcher” or “the shortstop” does. Even though the same ballplayers or other agents could be identified by their names, one can speak of real-life events as if they were plays or television episodes or even long-running soap operas. The simplest such identificatory framework is one’s momentary visual space. You can identify objects ostensively by locating them in that space. On other occasions, one is locating persons, objects, places, events etc. by their roles in the drama (or comedy) of one’s personally remembered past.

Such subject-centered modes of identification are called perspectival. They have to be distinguished from the identifications that are called public alias object-centered modes. The difference is most easily explained by thinking of the world in terms of ancient play where the actors all wear masks. Public identification concerns an actor after he has slipped off his mask, shed his perspectival *persona*.

These concepts and distinctions have been explained in greater detail in my earlier work. They are related to distinctions familiar to neuroscientists. For instance, in visual cognition the
contrast between perspectival and public identification is manifested as a contrast between the (mis-named) “where” system and the “what” system. In the former, one’s visual space is the framework of identification. In the latter, the framework (if that is the most descriptive word here) can be thought of as one into which census takers try to place the denizens of a country. Psychologically speaking, it is the tacit framework that we use in visual object recognition.

The distinction between public and perspectival identification manifests itself among other places in the operational ambiguity of who-questions. Imagine that I am witnessing a gathering of high financiers, and I ask, “Who is that gentleman?” I might receive the answer, “That gentleman is George Soros.” Now a more knowledgeable participant might know all about the famous investor but still does not recognize him and might therefore ask, “Who around here is George Soros?” A response might again express by the very same words “That gentleman is George Soros.”

Obviously the force of this one and the same form of words is different on the two occasions. An epistemic logician has no difficulty in tracing the difference to an ambiguity of “who” questions and further to a difference between two different pairs of quantifiers, relative to two different modes of identification.

It is tempting here to compare the distinction between perspectively identified objects and publicly identified ones with the distinction between phenomenological and physical (natural) objects. I do in fact believe that there is a deep connection here. Indeed, in phenomenology as well as in Russells’ theory of objects of acquaintance, we are in the last analysis dealing with two kinds of individuation rather than with two species of objects. Unfortunately, the relation of the two contrasts is too full of subtleties to serve an explanatory function here without further explanation. I have dealt with some of them in the essays collected in Hintikka (1998).

This difference dramatically shows that we must always rely in one actual semantics on some one identification system and not merely on a reference system. For the references of our linguistic expressions are obviously the same no matter which identification mode we are using. It even turns out that in the case of visual cognition the two identification systems are implemented by anatomically different centers of the brain. Linguistically speaking, any who or
what question presupposes one particular mode of identification. Otherwise, it is ambiguous in
the same way as my sample inquiry “Who is George Soros?”

4. Is Descartes’s “I” merely perspectival?

What all this implies for the cogito is clear. In considering his own existence, Descartes must be
tacitly assuming some particular kind of identification. Otherwise Lichtenberg’s criticisms will
apply with full semantical vengeance.

It is also clear that the object whose existence Descartes can hope to prove in the first
place must be perspectively identified. Russell might have said that it must be an object of
acquaintance. For the persuasiveness of the cogito is contingent on its object to be immediately
present to the arguer, personally present, as Husserl might have said. If the cogito is a
performance, this particular performance is like justice: it not only has to be performed, but it
must be seen to be performed (in a generalized sense of being witnessed).

This is closely related to the fact that the most persuasive versions of the cogito use the
first person singular “I”. I am an individual who is necessarily present to myself. To assert,
“René thinks, therefore I exist” is unconvincing even when uttered by René’s mouth. By the
same token the ego that witnesses René’s performance must be thought of as a perspectival
object.

In my second major cogito paper, I pointed out this peculiarity of the entity that Descartes
could hope to prove to exist; it must be perspectively identified. But this observation poses
more problems than it solves. The most central problem facing a rational reconstruction of the
cogito along these lines is that Descartes’ argument now does not seem to yield the conclusion
he wants. For obviously what Descartes wants to prove is the existence of an objective res
cogitans, not an ephemeral perspectival object. It would not satisfy him to argue this thing
thinks, therefore this thing exists, whatever it is publicly. This would be the entire force of his
argument if both the thinking entity and the witnessing entity were perspectively identified.

But this seems to turn the cogito into a fallacy of ambiguity. For in the formula “I think,
therefore I exist” the first “I” is presumably a perspectively identified “I” while the second one
is immediately turned by Descartes into a reference to a res (res cogitans) which can scarcely be anything but a public object. Or, perhaps more charitably, it seems to turn the cogito into a contingent truth. What if the malicious demon made Descartes to forget his name, the one the second “I” is all-too-obviously a placeholder for?

This point is somewhat obscured by the fact that the first-person pronoun “I” has at least two logically different uses. It can be used to refer to either a perspectival or to a public object. Most commonly, it nevertheless refers to a perspectival object. But when the public identity of this “I” becomes important, the pronoun itself does not do the whole job. One typically has to resort to the use of one’s proper name. In taking an oath, I do not just say, “I solemnly swear,…” but, “I, Jaakko Juhani Hintikka, solemnly swear.” I will return to this vexing double-entendre character of the pronoun “I”. In fact, the two senses of “I” hang together only by thread of the assumption that I (the speaker) know who I am in the sense of public identification. I will return to the status of this assumption.

In this example it is easy to see why both kinds of identification are needed. The purpose is to commit myself as a public persona, but the act of commitment must be done by a perspectively identified person who is among other things observable by witnesses. We have here a nice analogical illustration of why the self Descartes tried to show to exist has to be perspectively identified: He has to be there (perspectively) to testify himself of his existence.

5. Problem of inferences between identification systems

Here we can see the generality of Descartes’ problem. His immediate problem is to use the existence of René his perspectival self as an a priori ground of the existence of a substantial, publicly identified ego that we might refer to as Cartesius. This is but a special case of the general problem noted above of drawing inferences from premises about objects identified in one mode to conclusions about objects otherwise identified. Such inferences seem difficult, nay impossible, as inferences about the events in a play to events in real life (and vice versa). The entire cogito argument might seem fallacious.
Descartes’ deeper problem is to draw an inference from perspectival objects to public objects, strictly speaking of course from perspectivally identified objects to publicly identified objects. This is indeed a problem. It is a special case of a more general problem. In terms of my play analogy the problem manifests itself in the apparent impossibility of making inferences from what actors do and say in playing their roles in a drama or comedy to what they are like, or are likely to be or do in their everyday life in the actual world rather than the imagined world of the play. If Laurence Oliver utters on a stage the words, “To be or not to be, that is the question; one cannot infer that the well-known British actor is contemplating suicide, only that a Prince of Denmark is doing so in Shakespeare’s imaginary world. Indeed, the analogy might therefore seem to reveal a fatal flaw in Descartes’ argument.

But this is not the end of the story. What a character on the stage or in a movie is is not in all senses of the expression relevant only to his or her imagined world. There are two ways in which the real world and a fictional world of a drama can so to speak interact conceptually. A character in a movie can make statements as a part of the movie that pertain to “real” people in the sense of publicly identified persons. I once saw a TV episode in which a disappointed fan had sued the coach of the Chicago Bears football team, Mike Ditka, for a breach of promise because the coach had committed himself to his team’s having a winning season. The show received much of its entertainment value precisely from the fact that the statements made in the fictional lawsuit pertained to an actual, much beloved and much hated team.

6 Representing oneself

Moreover, occasionally a person, usually a well-known public figure, has a cameo role as playing himself or herself in a play or in a movie. I once saw a movie about an imaginary tennis star in which several of the top tennis players of the time (John McEnroe, Pancho Gonzales, Vitas Gerulatis etc.) appeared as themselves. And in the television episode about the Chicago Bears the special piquancy was created by the fact that the coach, Mike Ditka, played himself in the episode.

This does not change the fact that statements made by actors in a play are part of the action in the imaginary world created by the playwright or the movie director. Nevertheless,
they can literally be about real-life persons. To take one more example, suppose that Clint Eastwood is playing Dirty Harry. He could say, in such a role, “In this situation even Clint Eastwood could not keep a straight face”. The statement is made by Dirty Harry, not by Clint Eastwood, but it is about the actual Clint and not about the fictional Harry. It has to be verified or falsified by examining Clint Eastwood the real-life person, not by Dirty Harry, even though it is made as part of the play. Consequently, Clint Eastwood can while still playing a role not only make a statement about himself as a public figure, but can make his statement false by doing or saying something. In my example he could prove his statement false by maintaining a stiff upper lip. In the other example, John McEnroe could say “Even John McEnroe could not return that shot” and disprove it by returning it. Hence in a clear-cut sense what happens in a play as a part of the play action can demonstrate something about the real world.

7. Why is the cogito a priori?

But does this really generate an a priori argument? Earlier, it was pointed out that “I” relies primarily on a perspectively identified object. This object is de facto identical with a publicly identified object, viz. the bearer of its name. So why cannot our philosopher argue, “I, René Descartes, think, therefore I, René Descartes, exist”? We saw the reason: the identity of René the perspectively identified I and Cartesius the public person seems only a contingent one.

What is going on is that the two identification systems are correlated with the same reference system. And it is another feature of the logic of “I” that it can be used to refer to a publicly identified object, viz. whatever public object is identical with the perspectival object “I”. Hence the argument might thus run somewhat as follows, “I (the perspectively identified object) exist, therefore whoever I am (publicly identified) also exists”. Furthermore, the fact that that public object is named Cartesius can then serve as the supplementary conceptual truth that enables René to think of his conclusion to pertain to an actual (that is, publicly identified) res. And I am this particular res for the same reason why a certain actor is (plays the role of) such-and-such character. The crucial fact is that the naming relation is obviously a conceptual (linguistic) matter, not a contingent (factual) one.
This point is worth emphasizing. Admittedly, a *cogito* type inference depends on knowing who represents whom. I have to know that Dirty Harry is played by Clint Eastwood or John McEnroe by himself in order to understand the performatory affect of what they do. But *this identification is a conceptual truth*. The need of this information therefore is in keeping with the a priori character (one might say conceptual or even necessary character) of the argument. It is not a contingent truth. Which actor has which role is a part of the definition of the play or rather of the particular production of the play. In order to ascertain the identity of a character in a play and an actor you do not have to research into recorded theatrical history. It suffices to read the playbill. A playacting demonstration of something about the real world is therefore in perfectly good sense a conceptual truth.

But does this analogous identity really hold for purely conceptual reasons also between an object’s perspectival and public roles? Are these roles related conceptually in the same way as an actor and the character he or she plays? In most cases, they are not. A true statement like “This man is Mayor Menino” is not true for conceptual reasons alone. But there is one case in which this identity holds. It is the first-person singular pronoun “I”. As was pointed out earlier, in one of its typical uses a perspectival and a public identification coincide per definiendum, in spite of the tension there is in its meaning between perspectival and public identification. If I introduce myself to a new acquaintance by saying “I am Jaakko Hintikka”, I am not stating a fact about the world, but a conceptual, in a sense a linguistic truth. I am revealing to you my name. Hence the roles of perspectival and public identification are conceptually connected in the case of “I or “me”. This is one of the most characteristic features of this pronoun semantically, a feature that is tailor made for Descartes’ purposes.

But an objection is forthcoming here. It was pointed out that even in the case of the first-person pronoun “I” the two modes of identification go together only by virtue of the fact that the self-referring person knows who he or she is by the public criteria. An amnesiac may fail to do so. However, this does not alter the fact that the connection is a conceptual one. What an amnesiac is forgetting is not an empirical fact but a conceptual truth, viz. the meaning of his name. I may forget my name, but as long as I can speak English I know that I can refer to my publicly identified self (and not only to my perspectivally identified incarnation) by saying “I”.
This incidentally shows what is true and false in Kripke’s notion of rigid designation. He has seen the sense in which a proper name refers to whatever it refers to for conceptual reasons. But what it refers to in another world (scenario) can only be determined on the basis of that scenario, and cannot be determined by assigning a reference to it in the actual world. This is just like the identity of René’s “I” with Cartesius. It holds for the relevant production of the “cogito play”. It does not tell anything about who in another production would have to utter “I” in order to refer to Cartesius.

9. The ergo of the cogito

These insights into the different distinctions between separate but coexisting modes of identification enable us finally to sum up the logic of the cogito. Descartes is as it were staging a playlet in which he is himself acting. Suppose the character he plays is called René. Then René can say, as part of the play, “Cartesius exists”. By saying so, he demonstrates the existence of the character called René. This is analogous to his making his existence obvious through the thought-act of contemplating his existence as a perspectival object (object of his thought). This does not yet imply the existence of Cartesius the publicly identified philosopher. But René is outside the play the same person as Cartesius. Ergo René’s thought act demonstrates the existence of Cartesius, on the strength of the additional assumption that the actor playing René is indeed Cartesius. And this is not a contingent truth about de facto identities but determined by the assignment of roles that is part of the definition of the play in question or, strictly speaking, of that particular production of the play.

Alternatively but equivalently, the role of René that Descartes has playing in his mental drama was that of a skeptic who is trying to deny everything. When he extended his doubt to his existence and expressed it by asserting to himself, “I do not exist”, he thereby demonstrated not only the existence of a character in a play but of the public person who was acting in that role. The cogito can be understood in either way.
10. But is this Descartes’s argument?

This interpretation of the Cartesian cogito might perhaps seem far-fetched. But is it really artificial? It is not far-fetched to imagine that Descartes actually thought about his argument in terms of role-playing

Actors, taught not to let any embarrassment to show on their faces, put on a mask. I will do the same. So far, I have been a spectator in this theatre which is the world, but I am now about to mount the stage, and I come forward masked (AT X 213, translated in Collingham et al, 1985)

Was the cogito argument part of the role on the stage of life that Descartes was assuming and did he wear the mask of René the temporary Pyrrhonist?

11. Descartes’s “skepticism”

Furthermore, the interpretation presented here helps to put into perspective Descartes’s method of doubt and his relation to skepticism. In what sense was Descartes a doubter? Not by way of his settled philosophical views that were the intended outcome of his arguments, including the cogito. On the contrary, he wanted to prove his essence as a thinking substance, God’s existence, and the veracity of clear and distinct ideas, among other things.

Instead of professing skepticism or “Pyrrhonism”, as it might then have been called, Descartes use a skeptical line of thought against skepticism, but pushing them to the limit. This kind of argument inevitably presupposes that the arguer is as it were speaking in two different voices. If René should carry a normal single-minded inquiry and suddenly assert something contrary to what he had earlier asserted to himself, we would have to say that he just changed his mind. Whatever he had asserted before this volte-face is not automatically relevant to his new views.

But of course this is not what Descartes is doing. He needs an alter ego, call him Cartesius, to witness René’s skeptical thought-experiment and draw a conclusion from it. Hence
speaking (or rather thinking) in two different voices is an integral aspect of Descartes’ method of doubt. He has to be a serious skeptic, but only in the role he is playing.

In other words, Descartes does not literally adopt skeptical views or arguments himself, he lets René assume them

I resolved to assume that everything that ever entered into my mind was no more true than the illusions of my dreams.

(*Discours, A & T* vol. 6, p. 52)

Such an assumption amounts to a step from the normal cognitive world of Cartesius to the mental play featuring René the extreme Pyrrhonist. However, it would be a mistake to say that René in playing that role is merely contemplating the possibility of the truth of skepticism. René must assert them in order to make obvious their falsity.

One informed and perceptive scholar goes as far as to say of Descartes’ *Aufhebung* of skepticism

This amazing change of state was possible only because Pyrrhonism had been taken [by Descartes] sufficiently seriously.

(*Popkin 1964, p. 193*)

This may sound paradoxical, in that the skeptical position is in a sense not taken seriously as his own position, but rather assumed as a starting-point of a thought-experiment. The play analogy shows how the two horns of the apparent paradox are reconciled. It was René who had to take Pyrrhonism seriously, not Cartesius the critic of skepticism.

It probably was this duality of roles that made it easy for Descartes’ contemporaries to think of him as a skeptic. They did not realize so to speak that what René was saying did not represent the settled views of Descartes.
Another important objection is that the logic I have attributed to Descartes might seem to be ad hoc. The answer is that there is nothing ad hoc about the general problem that has been attributed to him. The problem is the possibility of reasoning from objects identified in one way to the same objects identified in another way. It may help to dispel the impression of adhockery if we present another instance of the use of the idea of role-playing for the purpose of making inferences about objects identified in two different ways. In this other case study the “actors” are not humans but natural numbers, and the name of the “play” in which they are assigned unfamiliar roles is Gödel numbering. (See here Hintikka 2000.) This “play” is used by Gödel to prove his famous first incompleteness theorem.

It has been often said—even by Gödel himself— that Gödel’s reasoning in proving this theorem is comparable with the reasoning involved in the liar paradox. (Gödel, 1931) This is seriously misleading. Numbers cannot literally refer to themselves. There are no first-person pronouns in the language of arithmetic and no other means of direct self-reference. At one point Wittgenstein tried to envisage an extension of our arithmetical notation in which such self-reflexivity would be possible. This would undoubtedly have made the mathematical language in question inconsistent.

The kind of self-referentiality that there is in Gödel’s argument is the same kind as a thespian’s reference in a play to himself or herself as an everyday person outside the theater. In Gödel’s play, honest everyday numbers are assigned a role as codifications of numerical statements or other formulas, in the same sense as a certain person can be at the same time Sir Laurence Olivier and Prince Hamlet. It is only in this role that they can refer to numbers, including themselves. It has been claimed (for instance by Burton Dreben) that Gödel’s famous theorem is just an elementary theorem about natural numbers. This is true, but it does not mean that it can in its dramatic role be at the same time a metalogical result about the limits of formal provability of arithmetical truths.

Gödel considers a certain formally defined arithmetical predicate $F[x]$. By ingenious reasoning he constructs a number $g$ that will in his play have the role of $F[g]$. Cleverly, he has selected $F[x]$ in such a way that in its play acting role it says, translated into English, “The

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sentence with the Gödel number x is not possible”. Of course, F(x) is in its workday mode an unproblematically arithmetical predicate. But (assuming the consistency of arithmetic) g cannot then codify a false statement, for its negation says that it is provable. (Consistency means that provable statements are true.) Hence it is true but unprovable, for that is what it truly says. This is Gödel’s result.

Thus the apparent self-reference in Gödel’s argument is in reality inference from objects identified one way to the same objects identified in another mode, just like the inference from René’s existence to that of his alter ego Cartesius.

This also illustrates the fact that Descartes’ argument does not in the last analysis depend on the peculiarities of the logic of first-person pronouns. (As was pointed out, there are no first-person pronouns in arithmetic.) Descartes trades in the logical behavior of “I”, but he does not need it for his argument. The cogito is not a mere theorem of the logic of “I”.

The playacting analogy also provides a more accurate representation of Gödel’s reasoning than most of the philosophical discussions of its significance. At the same time, it shows the essential similarity of Gödel’s line of thought with Descartes”.

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References

(Only works actually referred to are listed.)


Descartes, René, 1897-1910, Oeuvres de Descartes, ed. by Charles Adams and Paul Tannery, L. Cerf, Paris. (Referred to as A & T.)


Gödel, Kurt, 1931, “Über formal unentscheidbare Sätze der Principia Mathematica und verwund


Hintikka,Jaakko, 1996, “Cogito, ergo quis est?”, Revue International de Philosophie vol. 50, pp. 5-21

Hintikka, Jaakko, 2000, *On Gödel*, Wadsworth, Belmont, CA