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Abstract

Human beings are special in mastering, apart from signs, a number of semiotic resources embedded already in perception, which is not differentiated, but which may still be iconic, indexical, or symbolic. The sign is no doubt one of the missing links between human beings and other animals. An even earlier breaking point between (some) animals and human beings may be the ability to distinguish type and token, that is, to have access to a principle of relevance. Somewhere on the border between relevance and the sign is found the act of imitation. The Peircean sign, which is so much more (and less) than a sign, may be able to account for the emergence of imitation and its accomplishment in the sign function, in the restricted sense.

Chapter 5
Semiosis Beyond Signs. On Two or Three Missing Links on the Way to Human Beings

AQ1 **Göran Sonesson**

Abstract Human beings are special in mastering, apart from signs, a number of semiotic resources embedded already in perception, which is not differentiated, but which may still be iconic, indexical, or symbolic. The sign is no doubt one of the missing links between human beings and other animals. An even earlier breaking point between (some) animals and human beings may be the ability to distinguish type and token, that is, to have access to a principle of relevance. Somewhere on the border between relevance and the sign is found the act of imitation. The Peircean sign, which is so much more (and less) than a sign, may be able to account for the emergence of imitation and its accomplishment in the sign function, in the restricted sense.

Contemporary studies of evolution suggest that not only human language, but also the capacity for using pictures, as well as many kinds of mimetic acts and indices, are (at least in their full, spontaneously developed form) uniquely human. It is clear that semiosis itself must be manifold and hierarchically structured, in ways not yet dreamt of in our philosophy. In order to grasp some of the discontinuities between human beings and other animals, it is useful to start out from the conception of phylogeny suggested by Merlin Donald (1991, 2001), which may be supposed to have a least some rough parallels in ontogeny.

In Donald's evolutionary scale, stages of episodic, mimetic, mythic and theoretic culture correspond to types of memory (Fig. 5.1). According to this conception, many mammals, which otherwise live in the immediate present, are already capable of episodic memory, which amounts to the representation of events in terms of their moment and place of occurrence. The first transition, which antedates language and remains intact in language impairment (and which Donald identifies with ~~homo erectus~~ and wants to reserve for human beings alone) brings about mimetic memory, which corresponds to such abilities as tool use, miming, imitation, co-ordinated hunting, a complex social structure and simple rituals. Without even taking into account intricate phenomena such as social structure, ritual, and hunting, one cannot avoid observing the heterogeneity of this list: in some cases, such as most clearly tool use and some instances of imitation, no sign structure, with a clear distinction

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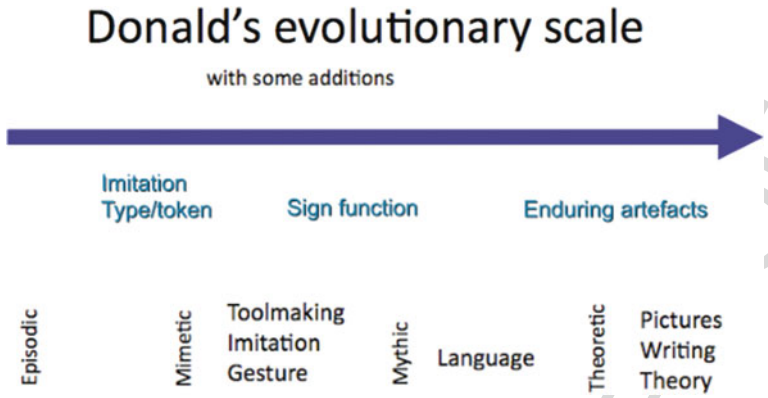

Fig. 5.1 Donald's model of evolution related to some further discontinuities: type/token, the sign, system character, and organism- independent artifacts

of expression and content, is required, but simply the conformity of tokens to a perceived or remembered type, but in other cases, exemplified by other instances of imitation, and by miming and other gestures, the sign function would seem an absolute prerequisite. If early mimesis may give rise to the organization of tokens into types, the sign would seem to emerge at the later mimetic stage.

Only the second transition brings about language (which, Donald muses, may at first have been gestural) with its *semantic* memory, that is, a repertory of units which may be combined. This kind of memory permits the creation of narratives, that is, mythologies, and thus a completely new way of representing reality. Although Donald is not very clear about it, his description of semantic memory could be taken to imply the presence of system character, that is, an organization in which signs mutually define each other. It is quite conceivable for language (but perhaps in an earlier gestural form) to be the first extant sign system.

Interestingly, Donald does not think development stops there, even though there are no further biological differences between human beings and other animals to take account of (however, the third transition obviously would not have been possible without the attainment of the three earlier stages). What Donald calls *theoretical* culture supposes the existence of external memory, that is, devices permitting the conservation and communication of knowledge independently of human beings. The first apparition of theoretical culture coincides with the invention of drawing. For the first time, knowledge may be stored externally to the organism. The bias having been shifted to visual perception, language is next transferred to writing. It is this possibility of conserving information externally to the organism that later gives rise to science. This, again, would seem to be a breaking point on the way to human beings: the possibility of memory as an external record, which perdures independently of the human organism.

Elsewhere, I have used Donald's conception of evolution, as rendered in the model above (Fig. 5.1), to discuss the curious fact that iconicity (and indexicality) are present already at the second stage, as mimetic gesture, but then makes an

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renewed appearance at the fourth stage, in the shape of pictures (Sonesson, 2006, 2007a, in press). I have also discussed, within the same framework, the final "missing link" in the progression from animal to man, the emergence of organism-independent artefacts (Sonesson, 2007a, 2007b, 2010a, 2010b, in press). In the following, however, I will be concerned with two other, (nearly) missing links, the (principle of) relevance and the sign, as well as the act of imitation bridging them.

5.1 A Sign Concept for Integral Semiotics

The most serious problem of semiotics is that both the Saussurean and the Peircean brands of received semiotic theory do not explain *what* a sign is; they simply take it for granted. It is not enough to say there are signifiers and signifieds, or representamen, object, and interpretants, without specifying the requirement for something to fall under one of these categories. A useful concept of *sign* designates a kind of meaning, but it does not cover all meanings. Perception is clearly meaningful to animals and infants alike, but it seems reasonable to suppose that the capacity for *sign use* is a much more exclusive property. Conceptualizing the capacity of sign use in this way may help us to distinguish stages in evolution and development, notably the relationship between imitation and sign.

We will say that the sign is a meaning which is made up of two parts, traditionally known as *expression* and *content*. That the sign consists of two parts implies that the parts are separated. In Piaget's (1945, 1967, 1970) terms, they are "differentiated from the point of view of the subject". This it not to say that the differentiation is "subjective", in the ordinary language sense – in most cases, the differentiation is part of what is learnt by the child growing into his particular culture. However, what is differentiated within the sign may or may not consist of several objects in the "objective" common sense world (where "objective" is that which is taken for granted in the dealings of ordinary life). Contrary to what Piaget suggests, we will therefore conclude that a thing which is immediately continuous to another or which is a part of another in the common sense world may very well be differentiated within the sign (cf. Sonesson, 1989, 1992b, 2010b, in press). We can imagine the same child that in Piaget's example uses a pebble to stand for a piece of candy having recourse instead to a feather in order to represent a bird, or employ a pebble to stand for a rock, without therefore confusing the part and the whole: then the child would be employing a feature, which is *objectively* a part of the bird, or the rock, while differentiating the former from the latter *from his point of view*. Only then would he be using a true sign. In terms of socially better-established signs, a similar example would be the bull's head used to indicate, above a market stand, that beef is sold there. Although in France, for example, cast heads of bulls or horses are employed outside the relevant shops, it is still possible to find real heads used in traditional markets in some countries. In a parallel fashion, things that are similar to each other can be differentiated within the sign. Thus, there can be indexical (contiguity-based) and iconic (similarity-based), as well as symbolic (rule-based) signs. If I see a branch sticking up over the house and conclude that

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there is a tree behind the house, this is a mere indexicality; but the marks on the ground left by the animal are indexical signs, clearly separated from the (part of) the animals having produced them. And the photographic print of a person I know is clearly differentiated from the person seen in the picture.

Indeed, a further differentiation may have to be made for certain purposes. The marks on the ground tell me "an elk was here before", and this is something distinct from the marks, as well from the elk, which is now somewhere else. Similarly, the colour configuration on the photograph is distinct from the perceptual impression of my wife, and the photograph is here with me now, while my wife is at her working-place. This is why we really have to separate three parts of the sign, *expression*, *content*, and *referent*, where content is the standpoint taken on the referent by the sign user, as codified in some semiotic resource.[1] To the hunter, it is important to identify the marks on the ground (expression) as being those of an elk (indexical content), but, being a hunter, he cannot be satisfied with this; he will follow the traces left by the animal until he finds the real elk (referent). Looking at the photography, I have no trouble (unlike small children and animals) to distinguish the colour spots on the paper (the expression) from the vicarious perception it suggests, e.g. of my wife fifteen years ago dancing Jalisco in a ample, pink skirt (content), nor from the real person I have known for twenty-six years and with whom I share so many memories (the referent, the real, continuous person in my personal Lifeworld).

But differentiation is not a sufficient criterion. Each time we actively and consciously put together a set of items that we have perceived, we must first differentiate the items to be joined – as opposed to the obliteration of their difference in categorical perception. But categorization is not as such a kind of sign use. Contiguity and factoriality are present everywhere in the perceptual world without as yet forming signs: we will say, in that case, that they are mere *indexicalities*. An index, then, must be understood as indexicality (an indexical relation or ground) plus the sign function. Analogously, the perception of similarities (which is an iconic ground) will give rise to an icon only when it is combined with the sign function. As always, there are passages in Peirce's work, which may be taken in different ways, but it makes more systematic and evolutionary sense to look upon iconicity and indexicality as being only potentials for something being a sign.[2] Iconicity, indexicality, and symbolicity only describe *that which connects two objects*; they do not tell us whether the result is a sign or not (Fig. 5.2). These considerations allow us to separate the study of the phylogenetic and ontogenetic emergence of iconicity, indexicality and symbolicity from that of the corresponding signs (cf. Sonesson, AQ2 1998, 2001, in press).

[1] This is of course not the Peircean triad, but rather corresponds to the representamen, and to the immediate and dynamical objects, respectively (as well as to the corresponding interpretants).

[2] In relation to the standpoint of many other semioticians, I have to spell out here (as in many of my earlier publications, but perhaps most explictly in Sonesson, 2009), that I am not interested in finding out what Perice "really said". To give an all to simple expression to a complicated issue, I will just say that I use Peirce as a source of inspiration, just as I do with many other writers on the theme.

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	Firstness	Secondness	Thirdness
Principle (Firstness)	Iconicity	—	—
Ground (Secondness)	Iconic ground	Indexicality = indexical ground	—
Sign (Thirdness)	Iconic sign (icon)	Indexical sign (index)	Symbolicity = symbolic ground = symbolic sign (symbol)

Fig. 5.2 The relationship between principles, grounds, and signs, from a point of view inspired by Peirce as spelled-out in Sonesson (1996, 2007a, 2007b)

The sign as such is thus a whole made up of two parts, expression and content, and there is a *double asymmetric relationship* between them. First, from the point of view of immediacy, expression is more accessible to consciousness than content. In the second place, content is more in focus (more prominent, more important) than expression. When I look at the photograph, I am normally interested in the person depicted (my wife, either at the exact moment she was dancing Jalisco, or as an enduring person of my personal Lifeworld). My wife does not represent the photograph.[3] The phenomenologist Edmund Husserl (1939) formulated the definition of the sign (more precisely, "appresentation") more or less in these terms, but a similar view is implicit already in Augustine's conception of the sign (in our terms, the expression) as something which, by becoming conscious, makes us aware of something else (the content; cf. Deely, 2001).[4]

However, Bates (1979, p. 43) has hinted at the idea that the sign (our expression) and its referent (which would seem to correspond to both what I have called content and referent) must be conceived as being both similar and separate for a sign relationship to obtain. Bates' somewhat convoluted definition is later unpacked by Daddesio (1995, p. 117):

> Given a physical mark (sound, movement, shape, etc.), *a*, and a particular class of things, *b*, that *a* is thought to stand for, let us consider three possible ways which an organism can relate *a* and *b*. In the first instance, the organism fails to grasp any relation whatsoever between the two. /---/ In the first case, semiosis is thus absent. In the second case, the organism would be capable of relating the two, but instead of apprehending a relation between two distinct entities, it would simply react in the same fashion if presented *a* and if presented *b*. /---/ In the third case, the organism would recognize *a* and *b* as distinct but related.

[3] Seeing her now, I may of course be reminded of when I took that photograph, or when she made that dance, but this does not change the asymmetric structure of the sign, only my mental use of it.

[4] This does not preclude other relations between expression and content being symmetric. It is common to suppose a substitutive relationship, which is a symmetric relation, between expression and content, but this may be misleading, since expressions are rarely used for the same purpose and in the same context as their contents.

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Nevertheless, it is in fact impossible to conclude from an individual treating *a* and *b* as being distinct, that the particular relationship between *a* and *b* is necessarily one of appresentation (sign function). Daddesio's second case is that of categorization, which is important to perception. Given a prototype conception of categories, *a* and *b* may be treated as different just because they are differently central to the category of which they are perceived to be a part. Or they may be attended to differently, merely because one contains more, and more interesting, perceptual properties than the other (and, indeed, sign vehicles would tend to be "degraded stimuli", when compared to what they are signs of). The problem of separating the expression and the content of a sign becomes particularly acute in the case of an iconical sign, in which, by definition, expression and content must share at least some properties (Cf. Sonesson & Zlatev, forthcoming).

The sign, then, consists of two intrinsic parts, expression and content, which are related to a third, the referent. The relation between these parts may be iconic, indexical, or symbolic, but it always supposes a differentiation of the parts, from the point of view of the sign user. The sign relation is asymmetric in a double sense: what we call expression is always more directly perceived than the content, and the content is more accessible than the referent. On the other hand, it is the referent and/or the content that is in focus, at least more so than the expression.

5.2 Imitation as Token and as Sign

The characterization of the sign above is partly inspired in Piaget's notion of the "symbolic" (later the "semiotic") function, which is a capacity acquired by the child at an age of around eighteen to twenty-four months, which enables him or her to imitate something or somebody outside the direct presence of the model, to use language, make drawings, play "symbolically", and have access to mental imagery and memory. The common factor underlying all these phenomena, according to Piaget, is the ability to represent reality by means of a signifier, which is distinct from the signified. The sign function thus characterizes a stage of child development, though Piaget himself chooses to describe this stage only negatively, that is, a being pre-operational. Imitation, or, more exactly, "representative imitation", is claimed by Piaget (1945) to be at the origin of the semiotic function. When more closely scrutinized, some instances of imitation actually turn out to be signs already, while others clearly are not.

Donald places imitation within the second stage of human development, mimesis. In his view, mimetic culture starts out with the emergence of "conscious, self-initiated, representational acts, which are intentional [i.e. voluntary] but not linguistic" (1991, p. 168). The examples given by Donald are such things as gesture, dance, ritual, mime, play-acting, and (precise) imitation, but also tool use (or perhaps rather the social generalization of tool use) and skill. Somewhere in between mimesis and language the semiotic function arises, though Donald addresses this only obliquely, mentioning the use of intentional systems of communication and the distinction of the referent. In fact, this certainly happens between animal camouflage

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and pictures. According to Deacon (1997, pp. 74ff), however, iconicity as found in "a portrait" is "not basically different" from the fact of there being no distinction at all, that is, it would seem, from mere identity. On the following pages, Deacon then goes on to maintain that a number of phenomena which could otherwise appear to be completely different are in fact equivalent: the perception of the same "stuff" over and over again (seeing something that does not change into something else), camouflage as exemplified by the case of the moth's wings being seen by the bird as "just more tree", "stimulus generalisation", and even recognition, that is, the identification of something as pertaining to the same category. Although all or most abilities subsumed under the mimetic stage depend on iconic relations, only some of them are signs, because they do not all involve some asymmetric relation between an expression and the content for which it stands.

In fact, in his early book, Donald (1991, pp. 168f) opposes mimesis to mimicry and imitation, both of which are said to be quite common in animals but lacking "a representational dimension". Though the import of this claim is not clear, it could be taken to mean that mimicry and imitation, in this sense, lack differentiation. In Donald's (2001, pp. 260f) later book, however, "(precise) imitation" is an instance of mimesis. This would no doubt exclude the kind of automatic imitation in the infant ("neonatal mirroring"), discovered by Meltzoff, such as sticking out the tongue to one who does just that (Cf. Gallagher, 2005; also see Donald, 2001, pp. 264ff). It is less clear whether Donald would follow Tomasello (1999) in making a distinction between the imitation of goals (called "emulation"), of which he believes apes to be capable, and the imitation of means, which is a capacity Tomasello would like to restrict to human beings, although he later on (in Tomasello, 2008) recognizes its presence in at least some apes.[5] At first it may seem strange that imitating the goal is presented as being easier than imitating the means by which the goal is achieved. But no doubt it is less demanding to recognize the interest of the aim (getting the banana) than the interest of the requisite steps for realising the goal. At another level, it is like attending to the content, not the expression, of a sign. Indeed, it is an instance of quite ordinary Lifeworld behaviour.

One may wonder why tool use and skill are thought to be part of mimetic culture and not just "routine locomotor acts" or "procedural memory" which Donald (1991, p. 168) elsewhere takes pains to separate from mimesis. No doubt Donald (1991, pp. 171ff) would answer that they are different because they comply with his criteria for mimetic acts: they are "intentional" (that is, voluntary), "generative" (that is, analysable into components which may be recombined into new wholes), and "communicative" (or at least, as we shall see "public"). Moreover, they have reference ("in mimesis the referential act must be distinguished from its referent", that is, in our terms, there must be differentiation), stand for an unlimited number of objects, and are auto-cued (produced without an external stimulus). Generativity

[5] A study of imitation of actions from static pictures, reported in ~~Call, Hribar,~~ and Sonesson (forthcoming) would certainly seem to suggest that apes may be capable of imitating means as well as goals, at least in one sense of these terms. In his most recent book, however, Tomasello (2008) seems to downplay even more the capacity for imitation in apes.

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is a property of many kinds of meaning, which are not signs. However, it is not clear in what sense tool use and many other kinds of skill are "communicative", and therefore, in which way they have reference and stand for an unlimited number of objects.

After introducing "communicativity" as a criterion of mimesis, Donald (1991, p. 172) goes on to say that "although mimesis may not have originated as a means of communication, and might have originated in a different means of reproductive memory, such as tool-making, mimetic acts are, by their nature, usually public and inherently possess the potential to communicate." This, though, is very different from imitation as a sign, which is what is realised by the actor, who presents his acts to a specific public; it is even different from the child's symbolic play, which must be available to and shared with other children. What we have here is, first, the extraction of a token from a type, which supposes treating the other as a spectacle; and second, the realisation of the tool act, which is not public-directed, but can be made available to the public (Fig. 5.3). The use of the tool does require the separation of the typical properties from the single act occurring in the here and now, i.e. relevance. In order to learn the use of a tool, you must at least be able to isolate the properties that should be imitated from those which are of no avail. However, even though this act of imitation may be observed, it is not part of its purpose to be observed. When the actor who has the part of Hamlet lifts up the skull of "Poor Yorick", then his act does not only consist in imitating what a man having that name supposedly did in Renaissance Denmark, but also in presenting this act as something to be seen, as a spectacular act (cf. Sonesson, 2000a). The symbolic play of children may perhaps be considered to be some kind of intermediary case, because its spectacular character is not its ultimate goal, but is only instrumental in making the play function as play; indeed, it is not intentionally offered as a spectacle for individuals not participating in the play.

	Imitation (Token/Type)	**Imitation as Learning (Extracting Type from Token)**	**Symbolic play (Expression/ Content)**	**Play-acting (Expression/ Content)**
	Instantiates a type of act	*Extracts a type from one or several (novel) token acts*	*Represents a type of (habitual) act - or perhaps token outside of time and space*	*Represents an individual act in time and space*
vehicle	Using the typical means for realising the type hammering the nail	Observing the hammering (first token) extracting the type for doing hammering (second token)	Realising the typical acts of the mother part	Creating the appearance here and now of being Hamlet doing Hamlet things
tenor	Doing the type of act having as goal to hammer a nail	Extracting the type of hammering a nail	Doing what mothers usually do to their babies	Doing as Hamlet did in Helsinoer during the Renaissance

Fig. 5.3 From imitation as token for a type to imitation a sign

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Thus, tool use and other kinds of skill as such are not mimesis, because they are not communicative, but they are "public", and they lend themselves to imitation – which leads to generalization of tool use and skill in society. This is where they become different from routine acts and procedural memory. They are socially shared. But this is only possible if the act can be separated from the unique tool user and transferred to another user. That is, the act as token must be abstracted to a type in order to be realised in another token. What is shared is the type, in other words the scheme of interpretation, which defines the principle of relevance (in the sense of a rule that picks out the properties of one object being mapped onto another). In this sense (not in the sense of reference), a single mimetic act may correspond to various events.

It is therefore by means of imitation that the "extension of conscious control into the domain of action" (Donald, 2001, p. 261) may be obtained. But the act of imitation, in this instance, is in no way a sign. If I see somebody use a stone as a tool to crack open the shell of a nut, I may do the same thing, not to bring into mind the act of the other person I have observed, but to obtain the same effect. I attempt to realise the same act as he did, that is, to open the shell up, so that I can take out the nut and eat it. Instead of producing an expression that is non-thematic but directly given which refers to a content that is thematic but indirectly given, I am realising a new instance of the category of acts consisting in cracking open a nutshell. Like Tomasello's apes, I may of course try to obtain the same effect without attending to the adequate means, which would produce a failed act of imitation. Or, I may merely simulate the outer actions of cracking the shell open, without letting them have a sufficient impact on the physical environment, in which case I may either be engaged in symbolic play, play-acting, or simply practicing the movements.

Imitation, in this sense, may thus be said to be differentiated, in the sense of separating the mediator and that which is mediated, but it is not asymmetric, neither in the sense of focus, nor in that of directness. Indeed, it is really the type that is mediated by the token. This also means that the purpose of the act of imitation is not to present the original act to another subject (or even to oneself). Bentele (1984) in fact argued against Piaget that imitation does not manifest the semiotic function, but is a prerequisite for it: indeed, it will function as a sign only to the extent that it is taken to refer back to the imitated act, instead of just being another instance of the same kind.

Acts of imitation in this sense have two interesting properties: they are "public", in the very broad sense characterized by Donald, i.e. they may be perceptually, often visually, inspected; and they can be copied by means of the observer's own body, with or without some additional implement such as a stone. In both these ways, imitation is different from episodic memory; and it is different from procedural memory in being a public record. Like in procedural memory, the record is located in one's own body, but it can only function as memory to the extent that it is somehow separable from the body as such. In fact, this can only be so, to the extent that memory traces are instantiated in other bodies as well as in one's own body. This supposes a distinction between token and type (that is, relevance) preceding that of the semiotic function.

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5.3 The Peircean Sign or the Observer Observed

The Peircean sign is a sign only in a very Pickwickean sense of the term. It is one of three specifications of Firstness, Secondness, and Thirdness. It might be said to be concerned with interpretation in a more generic sense than the sign: "semiosis". Perhaps this is what Peirce was thinking about when, at a later stage, he complained that his notions were too narrow, and that, instead of referring to signs, he should be talking about mediation or "branching" (CP 4.3. and MS 339 quoted in Mertz & Parmentier, 1985).

Conceived in this way, Peirce's theory appears to be about the situation of communication, but much closer to what we now would describe as a hermeneutical model than to the model known from the theory of information. In this sense, "a sign [or rather semiosis] is whatever there may be whose intent is to mediate between an utterer of it and interpreter of it, both being repositories of thought, or quasi-minds, by conveying a meaning from the former to the latter" (MS 318, quoted by Jappy, 2000). In many passages, the object is not described as that which the sign is about, that is, to which it refers, in the sense in which this term is used in linguistic philosophy: instead, it is that which incites somebody to produce a sign (which may or may not coincide with the referent). It is in this sense that the object is Secondness: it concerns the relation between the reality perceived and the expression produced. Similarly, the interpretant must be seen as the result of the receiver taking in the whole event of the utterer creating an expression starting out from some feature of his experience. Because it refers to the relation between the utterer and that which he reacts to, it is not only an elementary relation, it is Thirdness. Indeed, this idea is very well illustrated by the notion of "branching", which Peirce used to characterise his later concept of mediation.

Even describing that which Peirce is concerned about as an act of communication may amount to being too specific. Instead, it could be characterized as an observation being observed. Summarizing all of Peirce's different attempts at pinning down the nature of Firstness, we could probably say that it is something that appears or may appear (without connection to anything ~~else~~. It is thus prior to all relationship. Secondness is not only the second term that comes into play, but also it is made up of two parts, one of which is a property, and the other a relation. It is something the function of which it is to hook up with something already given as a possibility. In this sense, it is a reaction, in the most general sense, to Firstness, where the first part is the connection to the property independently appearing and the second part describes the nature of this relationship. Thirdness is not only the third term which is ushered in, but it consists of three parts, two of which are relational: one which is hooked up to the term of Firstness and another which is connected to the relation of Secondness, together with which we find a third term describing the relationship between these two terms. It is thus an observation of the reaction. Appearance is monadic, reaction is dyadic, and observation is triadic (Cf. Fig. 5.4).

In social psychology, in particular developmental psychology, there is also much talk about dyads and triads, and about some things being dyadic and other triadic (cf. Tomasello, 1999). Thus, interactions, engagements, eye gaze, and so on, are said

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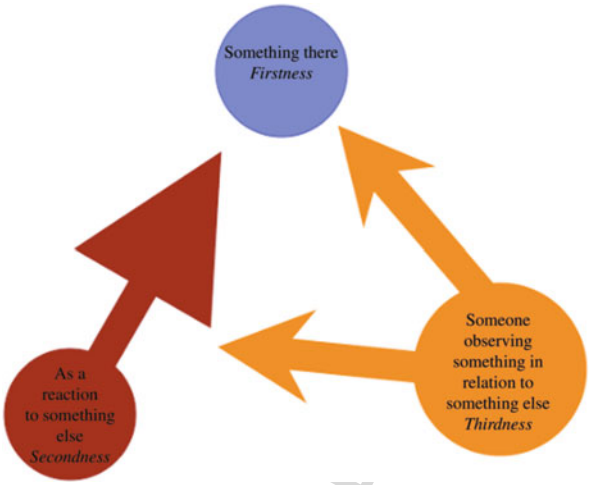

Fig. 5.4 The basic meaning of the Peircean triad

to by either dyadic or triadic. This terminology would seem to have originated in the sociology of Georg Simmel (Cf. Simmel, 1971). Dyads and triads are to Simmel groups of two or three individuals, respectively. Units, not relationships are counted. Between two individuals there may be any number of relationships, just as there may be between three individuals. When, in contemporary articles, ~~when~~ we read about a "mother-child dyad", etc., this is clearly what is meant. In general, translated into the terminology of Sonesson (2000b), a dyadic situation seems to be taken to consist of Ego and Alter (another person) or Ego and Alius (a thing or a person treated as a thing), whereas a triad includes all three types. Even more specifically, the triad tends to involve child, caretaker and a referent.

Other uses are more explicitly relational: dyadic is opposed to triadic as the relation of a subject to an object, or another subject is opposed to the relation of a subject both to another subject and another object. Thus, on one hand, there is "dyadic eye gaze: looking at object or person", and on the other hand there is "triadic eye gaze: looking back and forth between object and person" (Cf. Bates, 1979). A more complex interpretation would suppose that a dyadic relation is a relation between two individuals, while a triadic relation is a relation to the relation between two individuals. This is similar to what Peirce seems to mean, according to the interpretation given above. It should be noted that such a relation to the relation between Alter and Alius is not the same thing as two relations, to Alter on the one hand, and to Alius on the other. However, in practice, the only way to know that somebody is attending to the relationship between two individuals may be to observe him or her looking first at one individual and than at the other. Perhaps we would even need to go further, introducing relations between relations as well as relation between such relations.

Clearly social psychology, in spite (or because) of being a much more practical concern that Peircean philosophy, is as unclear about what is dyadic and triadic as Peirce. Basically, however, it seems that what is involved in dyadic relations, in both cases, is a subject taking cognizance of the world, and in the triadic relations,

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somebody being aware of what the first subject is doing.[6] Typically, in social psychology, this is the caretaker observing the child's perceptual interchange with the world. In other words, it involves Ego and Alter interacting with reference to Alius.

Understood in this way, Peircean semiosis (which we should no longer restrict to being a sign) is not properly speaking "communicative", in Donald's sense, but certainly "public" or, perhaps better "spectacular". It is available to others. Yet, for it to be available, it is not enough for it to be present, but it must be accessible to attention. What is needed is a community (not only a single caretaker) for which this information is available – and the capacity for attending, without which the information is lost, as it is on so many other animals than man, as soon as it goes beyond the properties defined by its ecological niche (Cf. Gurwitsch, 1957; Sonesson, 1989, 1996, 2007a, 2007b; Arvidson, 2006). Thus the capacity for attending freely to the outside world – going beyond the ~~Umwelt~~ to the ~~Lebenswelt~~ –, may well be the first missing link on the way from animals to human beings.

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[6] Or something: The mind is not necessarily a subject to Peirce, but he does admit that there is no way of explaining it, at least at present, than by reference to a subject.

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Chapter 5

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